Canadian Wildlife Administration

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Project WILD in Alberta

A wolf circles the defence ring of a herd of muskox in the predator-prey game called "Musk-ox Manoeuvres".

Project WILD is an interesting concept of wildlife-based activities for children, designed to be taught in the school system and elsewhere by adults who work with children. The Canadian Wildlife Federation has sponsored the program in Canada, and Alberta is the first province to implement it.

The Alberta Fish and Wildlife Division is in the second year of a three-year plan to make workshops available to interested Albertans. Activity manuals have been developed and are distributed at the workshop. The primary school level manual has been introduced and the secondary school manual will follow shortly. The division is working closely with the Alberta Department of Education to ensure the best delivery to teachers.

The ultimate objective of WILD, in Alberta, is to establish a network of individuals and wildlife managers through which conservation education can be disseminated to children in kindergarten through grade 12.

In Alberta, this new program is expanding the government's conservation training by supplementing its well-established and successful hunter education program.

The fundamentals

Hailing from Colorado, this comprehensive package of wildlife activities is designed for use by a broad spectrum of leader/educators. WILD is a balanced-bias program being neither pro nor anti-hunting. It aims to teach children how to think about wildlife, not what to think. It teaches the principles of wildlife ecology and conservation, offers opportunities to relate to wildlife and wildlife issues and encourages informed decisions regarding wildlife.

The project is a multi-disciplinary and applies to all subject areas. For example, Bearly Born, an exercise that constructs a growth curve of bear and human weights over time, uses math skills. Wild Words, a language arts activity, stresses observation and description of outdoor settings. Oh Deer, a population dynamics game where students become deer, provides enough running around to keep any physical education teacher happy.

Project WILD was developed by the Western Association of Fish and Wildlife Agencies and the Western Regional Environmental Education Council. It was vigorously teacher-tested for two years and has a built-in revision and updating procedure.

Canadian Sponsorship

The Canadian Wildlife Federation sponsors WILD in Canada and has edited and printed a Canadian version of the activity guide. This Canadian edition is in metric and replaces American issues and species with Canadian ones, in some of the activities.

The Alberta Experience
Year 1

In the first year, Alberta made the necessary arrangements to buy into the program through the Canadian Wildlife Federation, set up a steering committee, hired a full-time Project WILD coordinator, ran a teacher pilot project, drafted a curriculum guide, initiated a newsletter, conducted the first facilitators workshop and started offering workshops on request. (Manuals cannot be bought except with a little commitment and time. They are only available through attending a six-hour workshop. These workshops are coordinated and presented by the Division).

The Steering Committee met regularly at first, establishing directions for WILD within the Alberta context. Composed of representatives from federal and provincial government departments concerned with wildlife and the environment, animal interest groups and naturalists, it now meets as the need dictates.

The first facilitators' workshop, a two-day event, attracted 28 people. Many were teachers, but fish and wildlife staff, naturalists and freelance biologists were also represented.

The teachers' pilot project operated in close conjunction with Alberta Education. Thirty teachers, selected by their superintendents, tested 31 different activities while detailed information about WILD's usefulness in the Alberta curriculum was gathered through a lengthy questionnaire.

On the basis of these teachers' recommendations, a curriculum guide, Alberta Supplement to Project WILD, was drafted by three teachers who were engaged to write it. Alberta Education and the Fish and Wildlife Division jointly edited the guide. Cost of its publication was absorbed by the division.

This document was a firm requirement of Alberta Education before WILD could be considered for release in a comprehensive manner into the school system. It is a 48-page booklet outlining Alberta curriculum areas into which WILD fits. It also lists resources, divisional and otherwise, that support specific WILD activities. A teacher response form is also included to secure comments on which successive revisions can be based.

The newsletter, a quarterly publication, has a steadily growing mailing list. It is the main vehicle for keeping WILD's participants and would-be participants informed.

Year 2

Upcoming events for WILD in Alberta include the training of teacher facilitators from every school district in Alberta, training of more fish and wildlife facilitators, the expansion of WILD's availability to more user groups and the beginning of a pilot project in the secondary schools.

Long-term Goals

The division has several broad objectives for WILD in Alberta, and the project is meeting those objectives. It is enabling Fish and Wildlife to extend its education programs to younger children than formerly reached, to present other resources such as a wildlife brochure series, in the support of WILD activities, and to forge a stronger link between educators of all kinds and their local wildlife office.

One hundred and ninety-five people received a project WILD manual in the first year of workshops. A network of conservation educators is spreading across the province and a family of wildlife users and managers are working together for a better understanding of wildlife and its needs. This is WILD's ultimate goal. There is every reason to believe it will be met.

Conclusion

Alberta Fish and Wildlife in conjunction with the Canadian Wildlife Federation is breaking new ground in Canadian conservation education. Project WILD has a great potential in the Canadian context. It offers a way to reach children early enough to foster in them a solid conservation ethic.

Exciting as it is, however, WILD needs careful implementation to meet its potential. Alberta has been the first to apply WILD, and in the true spirit of the program would be happy to share that experience. Anyone wishing more information is invited to call or write to Jennifer Clark, Project WILD Co-ordinator, Fish and Wildlife Division, Energy and Natural Resources, Main Floor, North Petroleum Plaza, 9945 - 108 Street, Edmonton, Alberta T5K 2C9.

Jennifer Clark
Project Wild Co-ordinator
Public Information and
Extension Branch

Alberta

Use Respect

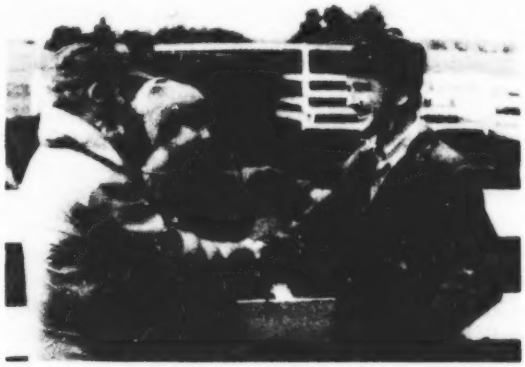
An Answer to Land Access

Alberta offers a great variety of recreational opportunities both on private and Crown lands. These opportunities lead to conflict between recreationists, such as hunters, fishermen, bikers and landholders over access. The conflict has been investigated recently by the Fish and Wildlife Division.

Hunter education staff from the division have conducted problem solving workshops involving both recreationists and landholders. Unquestionably, the number one problem throughout both rural and urban centres has been the question of "access and trespass."

Two fish and game groups in Southern Alberta, the Southern Alberta Outdoorsman from Milk River, and the Foremost Fish and Game Association decided to tackle this problem. At the outset, a group of 35 landholders, hunters, fishermen, hikers and photographers were brought together. Fish and wildlife staff functioned as activators and facilitators to get the workshop underway.

Hours were spent discussing the trespass laws and the various interpretations. Eventually, everyone began to recognize the sincerity of the representatives to deal with the problems.



At that point, a spirit of co-operation prevailed and everyone became less protective and more tolerant of other points of view. The bottom line was respect. The solutions were simple. Recreationists agreed to seek permission regardless of the legal status of the land, and landholders offered to make access to their land easier by posting their phone numbers.

As a result, there has been a marked improvement in the Foremost area since the workshop. It is now common to see several vehicles parked and to find landholders and hunters having morning coffee together, and enjoying each other's company. There are still some problems but respect is never wasted when used sincerely by responsible people.

In this regard, the Government of Alberta recognizes these differing interests and has promoted a co-operative approach among all users of public land through the "Use Respect" campaign. In addition, a comprehensive review of potential legislative changes is currently underway. For this reason, the existing provisions in the Wildlife Act were not changed in the new Act which was passed last fall. Such a change would have affected hunters, and yet not have addressed the broader aspects of the problem.

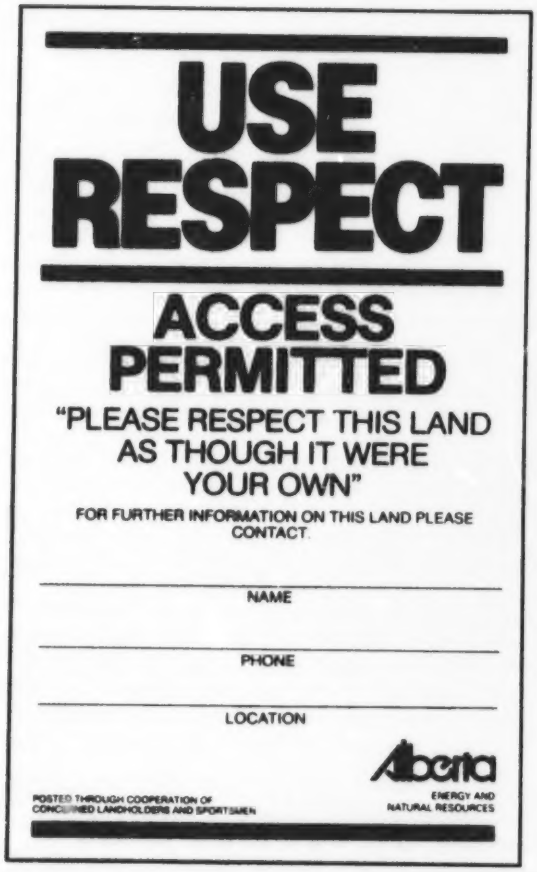
The objective of the campaign is to encourage recreationists landholders to respect landowners' rights; and it has been favorably received by both groups. Recreationists can benefit from talking to the landholder since he can provide access to land for hunting, information on the location of roads and trails, any hazards that exist, and where wildlife may be located. Landholders appreciate knowing how many people are on their land and having the opportunity to advise them of areas to avoid.

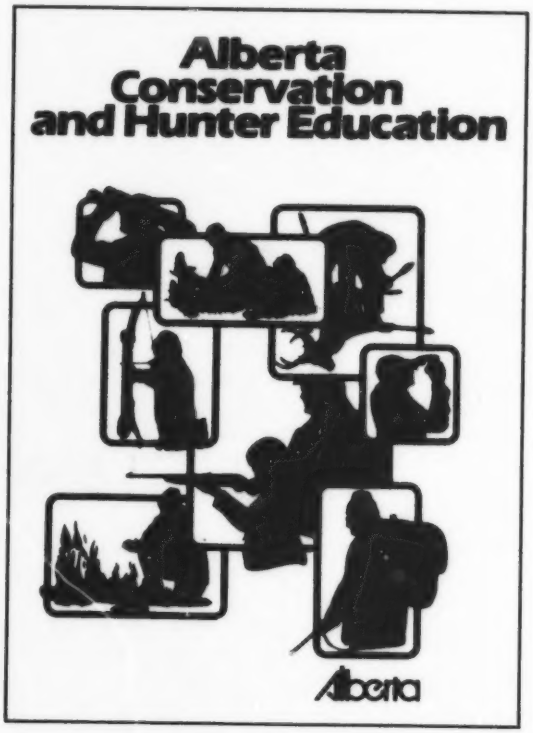
The campaign features four posters, the first one requesting that the landholder's permission be obtained for all types of access. The second poster allows foot access, but no motorized vehicles without permission. The third allows full access to the land, and the fourth sign establishes a designated route system which restricts access to specific routes or trails.

Recreationists who ask permission are usually well-treated by the landholders and lessees. Consequently, it is expected that the campaign will encourage landholders who are contacted to allow entry, and thus increase the amount of land available for recreation.

It appears that the "Use Respect" campaign strikes a reasonable balance between the needs of a landholder and the recreational user, and we feel this co-operative approach will help minimize conflicts and ensure that our natural resources are used and enjoyed to their fullest extent.

Bob Stevenson
Director
Public Information and
Extension Branch





New Data System Promises Better Fur Management

Some of the most useful communication about wildlife comes as feedback from the clients, the people who use the wildlife resource. In British Columbia information on the annual harvests of furbearing animals, supplied by trappers and fur dealers, has always been the raw material of fur management, providing broad indications of population trends and species status sufficient to avert any serious overexploitation. As the province develops the trapper must share the wilderness that once was virtually his alone, more specific, localized information is needed to manage and conserve wildlife.

In the past two years a new wild fur data system has been introduced in British Columbia. The new system taps the traditional sources for the usual harvest informaton, but adds new detail, and through computer processing easily provides area-specific results, in contrast to the broad brush figures which formerly were all that was available to managers. The system adds this new dimension with no additional effort on the part of trappers, and practically none on the part of the fur traders.

Trappers have a more direct hand in managing the wildlife species they utilize than other wildlife users do. Unlike hunters, who must adhere to bag limits, trappers generally have the privilege of deciding for themselves how heavily or lightly they will crop the furbearers accessible to their lines. The registered trapline system which originated in British Columbia in 1925 bestowed exclusive trapping rights in a given area. It eliminated competition among trappers on Crown land and encouraged them to harvest their lines responsibly through self-interest, if not through a commitment to wildlife conservation. Most have.

In fact trapping use has been so conservative that it is thought probable that some fur species could withstand a much heavier harvest in B.C. than has been taken in most years. However, as stated above, the only historical harvest figure readily accessible to wildlife managers related to the province as a whole and would not reveal to what degree a particular species was being exploited in any particular place within the province. The computerized wild fur data system will correct this situation.

Each year about 6,000 British Columbians trap. They operate 2,900 registered traplines on Crown land, and run other unregistered lines on private property. Of the total, about 3,000 are obliged to obtain an annual licence to trap; the other 3,000, native Indians, do not require a licence.

Licenced trappers have been required to report their annual harvest by species once a year, but the main source of data has been compulsory reports from the 60 or so fur traders licenced annually. The fur traders must submit monthly returns indicating when and from whom they have bought wild pelts. A royalty must be paid on all pelts, and a permit is required for all fur exports.

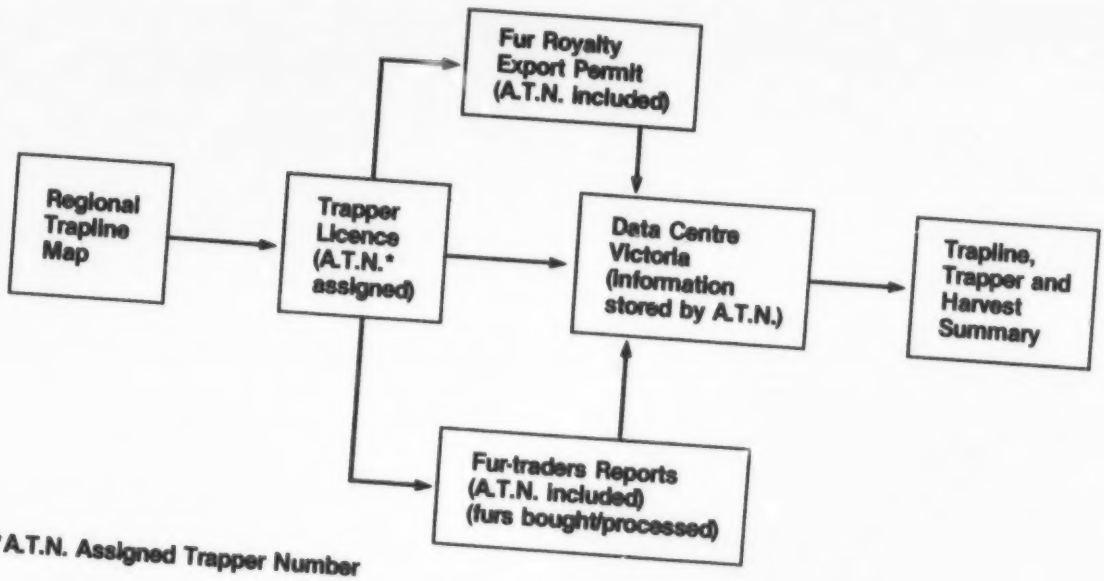
In the past, these reports provided sufficient general information for the compilation of provincial furbearer harvest statistics by species, and gave an indication of furbearer population trends for the province as a whole. The provincial figures served adequately for many years, but are steadily becoming less pertinent to management.

The accelerated expansion of logging, mining, seismic exploration, pipelines, corridors for power lines, roads and railways in recent decades, along with other conflicting land uses, have altered the capacity of the land to support furbearers, and have complicated trapline management. Some developments doubtless will benefit adaptable species like coyotes, fox, wolf, weasel, lynx, bobcat and squirrel, but furbearers less compatible with human activity will suffer declines. In B.C. there have been major permanent losses of furbearer habitat (and traplines) through the creation of extensive hydro electric reservoirs.

While provincial fur harvest figures seem to indicate furbearer populations are in no trouble - and in fact the best estimates of populations suggest they are being underharvested - there is a disturbing thought that the harvest might have remained high in part because development has made new areas easily accessible. It is conceivable that some areas are being "mined." Either way, whether local populations have been reduced, or are in fact healthy and could stand greater exploitation, there has been no way to determine actual conditions through the province-wide harvest returns.

The B.C. Wild Fur Data System, a computerized system developed to meet the need for fur

SCHEMATIC DIAGRAM OF WILD FUR DATA SYSTEM


Fur Royalty Export Permit (A.T.N. included)
Regional Trapline Map
Trapper Licence (A.T.N.* assigned)
Data Centre Victoria (information stored by A.T.N.)
Trapline, Trapper and Harvest Summary
Fur-traders Reports (A.T.N. included) (furs bought/processed)

*A.T.N. Assigned Trapper Number

management information that is obtained and applicable on an area-specific basis, is a modification of the system used in Ontario. It relates furbearer harvests to specific traplines, to wildlife management areas, and to regions. Records and information collected by the system are detailed and easily accessed.

The key element in the system is an Assigned Trapper Number (A.T.N.) given to each licensed or authorized trapper. The latter group includes the native Indians, who, though they need not buy a licence, now must have an assigned number in order to dispose of their furs.

The A.T.N. consists of eight letters and numbers. The first two digits indicate which of the province's eight resource management regions includes the greater part of the trapper's line; or, if he operates on private land, the region where the trapper does most of his trapping. Thus the first two digits might be "06," indicating the Skeena region. The management regions, in turn, are divided into wildlife management units, 218 in all across the province. Again the area where the individual does most of his trapping, or in which the major part of his trapline falls, is recorded.

These first four digits also form part of the numbering for registered traplines. A necessary first step in implementing the new data system has been to re-draw trapline boundaries on regional maps of standard scale. Some traplines had not been mapped for 30 years, consequently this major undertaking, begun in late 1981, has just been completed.

Next to the A.T.N., a letter indicates whether the trapping area is on Crown land (T, for trapline) or on private property (P). Three final digits representing the consecutive number (001 to 999) assigned to the registered trapline as one of several within a management unit.

Three administrative forms, legally required, have been redesigned to function as source, or information entry, documents. The information they contain can be directly keypunched into the computer files of the Wild Fur Data System.

Each form involves the A.T.N. First, the B.C. Resident Trapper Licence (renewable annually) supplies, in addition to the name of the trapper, the individual's address, sex, and birthdate. Second, the A.T.N. is also identified on all fur

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FISH AND WILDLIFE BRANCH - WILD FUR HARVEST SYSTEM

WILD FUR HARVEST SUMMARY REPORT

REGION: 05 - REPORTING PERIOD: 83/07/01 TO 84/06/30 -

	A.T.N.*	BEAB	BEAV	BOBC	COYO	FISH	FOX	LYNX	MART	MINK	MUSK	OTTE	RACC	SKUN	SQUI	WEAS	WOLF	WOLV
M.U. 01																		
TR0501P033	TRAPPER A		5		2	1	3			1	12				80	5		
TR0501P077	TRAPPER B								6					80	10			
TR0501T001	TRAPPER C		5			1					13	1				2		
TR0501T003	TRAPPER D		41		29		14	5		7	13					2		
TR0501T005	TRAPPER E		3		14	2	2	14	112	45					15	22	1	
TR0501T006	TRAPPER F		4		4		2		1	23	21				14	21		
TR0501T008	TRAPPER G		1		9			2		30	20							
TR0501T009	TRAPPER H		18					2										
TR0501T012	TRAPPER I		3							1	2							
TR0501T013	TRAPPER J		24		1		2		11	5	31				218	22		
MGMTUNIT TOTAL			104		59	4	23	23	130	112	112	1			337	72	1	
M.U. 02																		
TR0502P004	TRAPPER K				1		2											
TR0502P005	TRAPPER L				1	1												
TR0502P009	TRAPPER M		18		10	1		1	1		21				67	13		
TR0502P018	TRAPPER N		35		1	1			3	13	5					10		
TR0502P020	TRAPPER O				2					8						2		
TR0502P021	TRAPPER P		2							3	12				217	12		
TR0502P022	TRAPPER Q		1		3	1	2	2	5		38				117	4		
TR0502P029	TRAPPER R		4		7		3					1			4	2		
TR0502P042	TRAPPER S		4		2				3	3	4				5			
TR0502P050	TRAPPER T														90			
TR0502P059	TRAPPER U		1							4	48					1	1	
TR0502P062	TRAPPER V		1						2		2				171	12		
TR0502P067	TRAPPER W		3								4				126			
TR0502P071	TRAPPER X		2		4					1	8							
TR0502P081	TRAPPER Y		2							2	4				57	11		
TR0502P086	TRAPPER Z								7		11				15	12		
TR0502P087	TRAPPER aa														91			
TR0502P091	TRAPPER bb						1				15				32			
TR0502P098	TRAPPER cc		1		4						45				221	5		
TR0502P104	TRAPPER dd		7															
TR0502P109	TRAPPER ee		2						5	2					5			
TR0502T000	TRAPPER ff		6	1	6	2	8		1	5	2				21	3		
TR0502T001	TRAPPER gg		48		17		1			2	1	1	1		58	4		
TR0502T002	TRAPPER hh		79	1	23	13	11	8		5	265				251	22		
TR0502T004	TRAPPER ii		148		16	1	13	5	20	11	267	4			62	9		
TR0502T005	TRAPPER jj		7		3		1			1								
TR0502T009	TRAPPER kk						2		23	8	1				72	5		
TR0502T010	TRAPPER ll		6			1	3		4	3	2				33	1		
TR0502T012	TRAPPER mm	1	63		9	2	2	5	53	39	66	4			66	44		

*Actual names of trappers have been deleted.

British Columbia's new Wild Fur Data System supplies one-line summaries of annual fur harvest for each species, by individual trapper and trapline, wildlife management unit, resource region, and the province as a whole.

royalty/export permits; forms which must be obtained to pay the provincial fur taxes, and/or to export furs. The number of furs or pelts of each species covered by the permit is listed. Third, the A.T.N. of each trapper from whom a fur trader has acquired pelts must be shown on the monthly fur trader return. This document is the most important source of information in the system, since it shows the kind and numbers of each of seventeen furbearing animals a trapper has sold for the period.

With information from these three sources recorded in computer files, the system will provide one-line summaries of fur harvests by species for each trapper, for each wildlife management unit, for each region, and for the province as a whole. As an added bonus, mailing labels for the trappers and traders can easily be produced.

When the new system is fully operational the requirement of an annual report from each trapper, listing all furbearers taken by him, will be dropped. Trappers will have less paperwork than before. Fur traders, whose reports become even more important than before, will have little extra work, the only new requirement being that they conscientiously record an A.T.N. for each purchase.

With the establishment of the wild fur data system, British Columbia's wildlife managers will be able to monitor use of individual trap-

lines. Provincial policy is to encourage optimum utilization of furbearers consistent with sound conservation principles, and traplines on Crown land that are not being used are being de-registered and reassigned by public auction.

At the present time "use" is defined in regulations to mean that a minimum of 50 pelts or $200 have been realized from the trapline in a trapping season, goals easily met on almost any registered trapline. When several years' harvest information has been accumulated it is expected that these criteria will be shown to be very liberal, and this discovery may lead to the establishment of more realistic and flexible standards.

In time, the wild fur data system will provide a data base for better biological management of furbearers. In the case of cyclic species, for example, it would be useful to know where reservoirs of the animals persist in periods of low cycle, so that management effort can be concentrated where it will do the most good. With harvest figures keyed into geographic locations it will also be possible, in time, to discover which are the most important biogeographic zones for certain species.

There has been little active, hands-on management of furbearers in British Columbia. If more of that kind of management is to occur in the future it will be essential to know where available funds and resources can best be applied, knowledge that will be made readily available through the system. At present it is anticipated that habitat manipulation and other field management is likely to take the form of "extention" projects - demonstration projects conducted in co-operation with trappers who have shown good management of the fur resources on their traplines.

Once again the wild fur data system may very well serve to identify likely candidates. More prosaically, but equally useful, the system will quickly provide the names of trappers who are the best contacts for surveys relating to particular species - and conversely, the names of those who have little to do with some species. Thus the efficiency and economy of a variety of surveys and questionnaires can be improved.

The wild fur data system does not mark a radical departure in fur management. What it does is set the stage for the intensive, area specific management of furbearers that will be desirable in the future, and that may be essential if the province is to realize its policy of optimum fur production. The wild fur data system accepts information long supplied by the users of the resource and, through computerization, transforms it into a much more useful set of data for the better management of the resource.

Geoff Warden
Public Relations Officer

Outdoor Writers, An Update on Communications Opportunities

Introduction

Those people who write about Canada's natural environment contribute to the awareness the public has of our natural resources. They offer insights into how to appreciate, explore and conserve these resources, either directly or through a number of channels including outdoor magazines, the daily and weekly press, environmental periodicals and radio or television features. Writers also present features related to tourism and outdoor sports or recreation. They are a valuable source of information and direction on the numerous land-based and water-based activities in Canada for the audiences they serve.

Parallel to this, federal, provincial and non-government wildlife agencies are similarly involved in an effort to educate and stimulate wildlife awareness for the user, potential user, and non-user. In general, government and non-government agencies working to conserve our wildlife heritage encourage the public to appreciate natural resources with an aim to skillfully exploring them.

By studying and analysing the community of outdoor writers, we will be in a better position to co-operate with them, and to seek their support and that of the audiences they serve. Such an approach can promote a better understanding of the natural and cultural history of Canada's wildlife resources.

At this time, the relationship between wildlife management agencies and writers, or writers' associations is, broadly speaking, not extensive. Writers are contracted for specific projects related to activities or issues in order to gain publicity. This takes place on an "as-needed" basis.

Our co-operation with writers must move one giant step forward. The aim of this paper is to develop an understanding of outdoor writers in Canada, by examining what they are writing, for whom, and what approach they are taking. This in turn will enable us to determine what audience is being reached.

CHAPTER I, PART I
What is an Outdoor Writer? What is Outdoor Writing?

Discussions with outdoor writers, journalists, interpretive specialists, information officers, and outdoor editors resulted in a comprehensive definition of what an outdoor writer is, and of what constitutes outdoor writing.

The Writer:

An outdoor writer can be viewed as an individual with the following interests, abilities and/or background:

- professional interest in the outdoors and what can be done in it, or with it;
- experience in wildlife biology;
- ability to write for varied audiences;
- professional association with the field;
- creative writing talents;
- writing feature stories;
- concern with recreation and wildlife preservation;
- communicates the outdoor experience and the facts necessary to the experience;
- encourages audience to acquire outdoor oriented skills.

It is now possible to arrive at a definition of, **"Outdoor Writer."**

An outdoor writer is a creative individual whose professional expertise and ability enables him/her to communicate the outdoor experience to a varied audience. The writer's concern is for the preservation of wildlife and the role of the activities of man in the environment. He or she relays the facts which enable an audience to appreciate and take advantage of the outdoors for recreation or study.

The Writing: Outdoor writing serves the audience or readership it approaches in the following way:

- by examining the relationship of man to the environment;
- by presenting leisure oriented features including recreation, travel, and skill development or awareness;
- by examining resource conservation, natural history and natural sciences;
- by studying outdoor themes which have an impact on the quality of wildlife.

This summary of points leads to a definition of

Outdoor Writing:

> Outdoor writing involves communicating interactions in the natural environment to an audience or readership. It examines themes which have an impact on the quality of wildlife as they relate to Man's existence.

PART II
The Writer's Approach

There are two outdoor writers' associations in Canada with which a significant portion of people actively involved in outdoor writing are affiliated. "Outdoor Writers of Canada" serves English speaking Canada, and "L'Association des journalistes de plein air" serves the French speaking population. In addition there are several Canadian writers who also belong to the "Outdoor Writers of America."

The members of these organizations are full-time or part-time free-lance writers for newspapers, or magazines. They may be information officers, associated with a corporation or a government agency, or editors of magazines. Also included are broadcasters, lecturers, and authors.

Apart from membership in formal organizations, writers can be placed within a few major categories, depending on their professional terms of reference. The distinctions are the following: staff writers, for either the press or magazines, hobby writers, free-lance writers, authors, broadcast writers and government agency writers.

Free-lance Writers

Free-lance writers comprise the largest percentage of the outdoor writers in Canada (see Chapter II, Part I: Professional Occupation).

The nature of a free-lance writer's work is diverse; as a result it appeals to a wide audience. A writer with a good story, accompanied by excellent research skills and interviewing techniques will produce high quality material.

Good free-lance writers have the flexibility to sell their work to any magazine or newspaper that will accept it, although they will not write for competitive publications without the editor's consent. Being faithful to one particular publication facilitates the marketability of the writer's product by developing a consistent editorial style and readership.

Hobby Writers

This group of writers differs from the free-lance writers in that their work is not their primary source of income. The individuals have retired from a professional position, or have simply chosen to write occasionally out of personal interest. The subject matter of their choice has a personal appeal, and they often draw on their own experiences for much of the content of stories. The work of a hobby writer would appear more often in community or weekly newspapers than in magazines.

Staff Writers

Full-time writers are hired more often by newspapers than by magazines. Editorial positions for outdoor recreation are held by senior staff members who have several years of service with a particular newspaper. Most outdoor writers for newspapers are "columnists."

Staff writers for magazines are in a somewhat different situation, in that the audience they serve is more specialized than that of the daily or weekly press. In order to maintain and expand readership, magazine editors determine and monitor what is of interest to their audience. Staff writers are more likely to write stories which require research rather than those who rely on personal experiences.

Government Agency Writers:

Information services for organizations such as the provincial and territorial wildlife agencies and the Canadian Wildlife Service play a major role in making the public aware of a vast array of wildlife-related topics. These organizations are responsible for public service announce-

ments on radio and television, news releases, audio-visual products and for providing resource information to the general public.

It should be noted that there are many publications which will not accept government-written material. The importance of government writers liaising with the whole field becomes evident. Recommendations on this are listed in the closing chapter of this paper.

CHAPTER II, PART I
Demographic Information

The following information provides an indication of the distribution of outdoor writers in Canada in terms of what, who, when and where. There is a margin of error which must be accounted for. It is also important to realize that these observations and estimates may not be shared by every outdoor writer. Much of the information for this section has been obtained from members of the "Outdoor Writers of Canada," or "L'Association des journalistes de plein air."*

This section presents information in the following four areas: (1) the themes which are being approached by writers; (2) the medium which is being used by the writer (i.e.) newspaper or magazine; (3) the geographic distribution of writers in Canada, and; (4) age, sex and professional occupation.

The material which is currently covered by outdoor writers reflects gradually changing trends. This discipline is not subject to fast-paced changes, but rather to an evolutionary process.

The prevailing themes are those of environmental (including wildlife) consciousness. Forestry is a very popular subject for outdoor writing along with the ever-present issue of acid rain. Fishing is consistently the most popular subject of the outdoor writer, especially in newspapers where columnists are dealing with a wide audience.

There is a consistent core audience for the "consumer" aspect of outdoor writing including recreation/tourism and the sporthunting/sportfishing crowds. The writing aimed towards these audiences is frequently carried out on a regional basis; writers will deal with those themes which are geographically the most viable. For example, there would be more British Columbia based writers doing features on the wildlife of the Rockies than their Ontario-based counterparts. They may, however, be inclined to sell their work to a national publication.

Distribution of Outdoor Writers Across Canada

The following figures represent estimates of the distribution of outdoor writers across the country.

Western	10%
Prairie	8%
Ontario	70%
Quebec	10%
Atlantic	2%

Age

Approximately 75 percent of the members of the "Outdoor Writers of Canada" are over 35 years of age. Only about 10 percent of the writers of "L'Association des journalistes de plein air" are under 35.

The reason for this may be that many writers draw on years of personal experience for much of their background material. Another factor may be the amount of time necessary for a writer to develop professional status and readership. This age distribution may be a reflection of the years up to the 70s when outdoor writing was dominated by older individuals. It has been suggested that writers are now beginning to work at a younger age than they had previously.

* About 65 per cent of the outdoor writers in English-speaking Canada belong to the "Outdoor Writers of Canada"; About 90 percent of full-time French-speaking writers in Canada belong to "L'Association des journalistes de plein air." About 14 percent of outdoor writers in Canada belong to "The Outdoor Writers of America".

Sex

The membership of the "Outdoor Writers of Canada" includes about 85 percent male writers and 15 percent female. Approximately 5 percent to 6 percent of the outdoor writers in Quebec are female.

Traditionally, outdoor writing has been geared towards the hunting and fishing mystique, and education of an environmental nature was gained through experience rather than academic training. Many women, therefore, were not exposed to the outdoors to the same extent as were males, the result being that women have been less inclined to pursue this field. There are, however, a growing number of females actively involved with the profession now.

An examination of the membership list of the "Outdoor Writers of Canada" shows that about 50 percent of the members are involved in writing at the level of editor, publisher, communications officer or public relations officer. Only about 5 percent of outdoor writers have retired from another profession.

The professional occupation of outdoor writers, other than work in a related field is as varied as the number of possibilities which exist. All hobby writers and many free-lance writers use writing to supplement their primary source of income.

The Medium

The outdoor writer uses a number of media to approach his or her audience. This can be accomplished through the daily and weekly press, magazines, books (fiction, non-fiction, narrative, poetry or "picture" books), lectures, or via other audio-visual means.

The written word is the most popular medium because it is the most lucrative; 96 percent of writers use this method. The remaining 4 percent use lectures, broadcasting and film as their working medium.

About 85 percent of outdoor writers use both the daily and weekly press and magazines to reach their audiences. Writing consistently for newspapers provides the writer with a larger audience.

Authors of all books of an outdoor nature are limited to approximately 8 percent of the community. This reflects the fact that for the time spent the financial return and audience reached is less reliable than it is for magazines or the daily and weekly press.

Publishing

Virtually all outdoor writers who are members of the "Outdoor Writers of Canada" and "L'Association des journalistes de plein air" produce material which is published by the appropriate magazines and newspapers, as this is one of the criteria for membership. However, between 30 percent and 35 percent of outdoor writers are not members of either of these associations.

Outdoor magazines publish approximately 15 percent to 20 percent of work submitted by outdoor writers. Newspapers publish most written material submitted - about 75 percent to 80 percent - because of their higher frequency of publication.

PART II
Trends in Outdoor Writing

The subjects, style and methods of outdoor writing are evolutionary. They are based less on "fad" than other social trends because these changes are affected by the circumstances of our natural world as well as by the world's population. An outdoor writer alone cannot dictate the interests of a readership, however, he or she can provide incentive for continued interest in a certain subject, be it cross-country skiing, wildlife management, or acid-rain.

Over the past two decades outdoor writing has changed with the attitudes of the population. Fifteen to 20 years ago outdoor writing was oriented to the male population between the ages of 20 and 45. The subject-matter dealt with hunting and fishing; skiing, snowshoeing, or hiking was the necessary method for carrying out these activities.

Factors which have influenced the changing trends in outdoor writing include:

> The pace of life is rapidly accelerating and the resulting stress is leading people away from the pressure of the lifestyle to the woods for peace and repose. The environment has become family-oriented, therefore activities are directed this way. The writer in turn must gear his work towards these changing attitudes.

People are becoming more and more conscious of physical fitness. They are moving towards leisure pastimes which require activity. In turn, newspapers are putting more emphasis on the outdoor scene. Certainly campaigns, such as "PARTICIPACTION" have a direct effect on peoples' awareness of physical fitness. In 1984, Environment Canada sponsored a new PARTICIPACTION campaign designed to encourage outdoor activities.

Academic education also contributes to the changing trends in outdoor writing. Our cultural base is very much determined by what we have learned in the educational system. Previously the natural environment was not stressed in schools. This limited many people's knowledge to that which was gained through direct outdoor experience. Most people were not in a position to experience the outdoors, therefore, the environment remained largely unexplored with the exception, once again, of hunting and fishing. As environmental studies grew in importance in the school curriculum, awareness of our natural resources in turn developed, opening the environment to more exploration by more people, for leisure and study purposes.

People interested in hunting and fishing, for example, are concerned with more than simply the sport; the management of game and the regulations governing the sport are of constant interest to these individuals.

What of the individual writer? Until the late 1960s outdoor writing was dominated by individuals who wrote only about what interested them. It wasn't until the early 1970s that writing about the out-of-doors began to emerge as a career in itself. The outdoor writer now does not rely only on personal experience for material; he or she is a researcher and interviewer combining technical knowledge and skills in writing to produce a story.

By outlining three major categories of writing, it is possible to include those areas which touch most people who read outdoor magazines and the appropriate sections of newspapers.

Recreation and leisure based writing, including travel, is enjoying an upswing. This trend exists because poeple have more time and money to spend on leisure activities, a re-emphasis of the wish to get away from what may be a stressful urban or work environment.

This trend appears to have replaced that of "living from the land" which was very popular during the 1950s. Outdoor leisure activities were emphasized little during this period. The 1960s gave more attention to outdoor recreation, and "man as consumer of the environment" was stressed less. This ethic has a devoted following although the amount of writing based on it has decreased.

Interest and concern for the environment has increased over recent years. People are touched by the economic and social conditions which are the result of energy shortages, major pollutants and endangered species of plants and animals; they wish to be informed and aware of the issues which affect their lives either directly or indirectly.

Certainly, the magazine and newspaper industry is the most effective method for reaching the Canadian people with outdoor stories. The editorial content of Canada's nationally and regionally based newspapers and magazines varies from one part of the country to the other. In the same way, a writer's interests are frequently relevant to the area in which he or she resides. These two factors contribute to the differing trends and themes in writing across the country. Local impact is important to the marketability of a writer's material.

The trends in outdoor writing in Quebec were oriented more towards "man as user" of nature rather than "man as observer of nature." The passive outdoor recreation ethic there may be evident as a result of a history of different traditions and values.

Ontario is a major producer and consumer of the written word. It is interesting that a largely urban environment is inclined towards the outdoors. It may be that living in a heavily populated region like southern Ontario contributes to interest in the outdoors.

Canada's Atlantic Region produces a limited amount of outdoor material outside of newspapers. There are no magazines based on Atlantic Canada who's editorial content is de-

voted to the outdoors. Atlantic Insight and other general interest magazines do publish outdoor oriented features, however.

The prairie and western regions of Canada, statistics show, are largely consumers of National magazines such as Nature Canada and Canada Geographic. Western Canada Outdoors, published in Saskatchewan, and B.C. Outdoors are two regional publications which are circulated across Canada and elsewhere.

The daily press gives the widest coverage of written material. Most newspapers cover the outdoors in the travel or sport sections as well as in general news or as weekend features. Although the newspaper is a local medium, coverage includes all parts of the country; this is evidently where most people learn about the environment and wildlife.

The following statistical information will show where some Canadian outdoor-oriented magazines are distributed. The information was compiled from "Canadian Advertising Rates and Data" (CARD), December 1984 issue (this periodical also surveys daily and weekly newspapers across Canada).

Canadian Geographic June 1984
Average total paid circulation 123 495
Geographical Breakdown

Newfoundland	1,096	Manitoba	5,543
Nova Scotia	3,697	Saskatchewan	6,458
Prince Edward Island	377	Alberta/NWT	18,530
New Brunswick	2,339	British Columbia/Yukon	16,641
Quebec	5,598	U.S.	3,338
Ontario	55,274	Foreign	4,781

Harrowsmith June 1984
Average total paid circulation 145 631
Geographical Breakdown

Newfoundland	1,209	Alberta	14,038
Nova Scotia	5,516	British Columbia	22,676
Prince Edward Island	665	Northwest Territories	459
New Brunswick	3,445	Yukon	459
Quebec	7,351	U.S.	4,290
Ontario	73,860	Foreign	420
Manitoba	5,181	Miscellaneous	62
Saskatchewan	5,761	British Commonwealth	239

Outdoor Canada July 1984
Average total paid and non-paid circulation 127 058
Geographical Breakdown

Newfoundland	2,559	Manitoba	7,845
Prince Edward Island	295	Saskatchewan	12,610
Nova Scotia	4,742	Alberta/Northwest Territories	26,373
New Brunswick	5,350	British Columbia/Yukon	20,329
Quebec	3,721	U.S.	391
Ontario	54,239	Foreign	177

Nature Canada **December 1983**
Average total distribution 16 159
Geographical Breakdown

Newfoundland	157	Saskatchewan	662
Prince Edward Island	61	Alberta	2,146
Nova Scotia	547	British Columbia	2,386
New Brunswick	322	Northwest Territories	100
Quebec	1,367	Yukon	60
Ontario	6,590	U.S.	642
Manitoba	822	Foreign	297

Touring **November 1984**
Average total distribution 98 295
Geographic Breakdown

Newfoundland	10	Manitoba	15
Prince Edward Island	5	Saskatchewan	7
Nova Scotia	32	Alberta/NWT	100
New Brunswick	39	British Columbia/Yukon	77
Quebec	97,039	U.S.	80
Ontario	851	Foreign	40

Sentier Chasse-Pêche **June 1984**
Average total paid circulation 73 391
Geographical Breakdown

Newfoundland	15	Saskatchewan	11
Prince Edward Island	2	Alberta	58
Nova Scotia	12	British Columbia	31
New Brunswick	618	Northwest Territories	6
Quebec	73,165	U.S.	36
Ontario	947	Foreign	157
Manitoba	12		

B.C. Outdoors **June 1984**
Average total paid circulation 32 765
Geographical Breakdown

Newfoundland	11	Saskatchewan	126
Nova Scotia	23	Alberta	3,591
Prince Edward Island	2	British Columbia	27,808
New Brunswick	8	Northwest Territories	61
Quebec	33	Yukon	57
Ontario	255	U.S.	435
Manitoba	66	Foreign	139

Canadian Geographic **November 1984**
Average total paid circulation 123 495

Newfoundland	1,096	Manitoba	5,543
Prince Edward Island	377	Saskatchewan	6,458
Nova Scotia	3,697	Alberta/NWT	18,530
New Brunswick	2,339	British Columbia/Yukon	16,641
Quebec	5,598	U.S.	3,338
Ontario	55,274	Foreign	4,781

Equinox December 1983
Average total paid circulation 132 443
Geographic Breakdown

Newfoundland	1,347	Saskatchewan	6,267
Prince Edward Island	387	Alberta	17,838
Nova Scotia	3,956	British Columbia/Yukon	24,024
New Brunswick	2,199	Northwest Territories	766
Quebec	6,907	Yukon	481
Ontario	62,889	U.S.	3,008
Manitoba	5,486	Foreign & Misc.	910

Recommendations and Conclusions

All wildlife management agencies can become directly involved with the outdoor writer's community and develop with it a co-operative relationship. The preceding information shows where the writers are, who they are and what they are writing. There are several methods of using this information to establish and maintain a co-operative relationship with this community.

Regional offices can provide information, expertise and services to writers. Guides, technical support, advice, research materials, and photographs can be made available. This kind of response is important for two reasons; firstly it will encourage the writer to present an accurate picture of the local topic which is being discussed. Secondly, it will reinforce the positive working relationship between staff and the writer.

News releases are most often sent to the news editors of newspapers. Providing topical press releases, especially to community newspapers can be a most effective means of communicating locally significant messages to the writer and reader. Canadian Advertising Rates and Data is a valuable resource manual with which to identify print broadcast media by subject or locale. The writers themselves can be contacted to enhance the likelihood of getting a story into the newspaper.

There are several ways in which wildlife agencies can communicate their existence and the extent of available facilities to outdoor writers.

Both the "Outdoor Writers of Canada," and "L'Association des journalistes de plein air" have annual conventions. Input would be welcome at both of these conventions, in the form of a workshop and discussion on outdoor writing opportunities in a given jurisdiction. This must be arranged through each of the associations. (Addresses of contacts are in Appendix I). The "Outdoor Writers of Canada" has a newsletter which is a vehicle to present proposals to the outdoor writing community.

This report has identified the outdoor writers' community with the aim of encouraging government agencies and the writers to establish a positive working relationship. This information can be used as a series of guidelines which could lead to mutually beneficial future cooperation.

APPENDIX I
Contacts

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Secretary
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Sorel, Quebec
J3P 5N6
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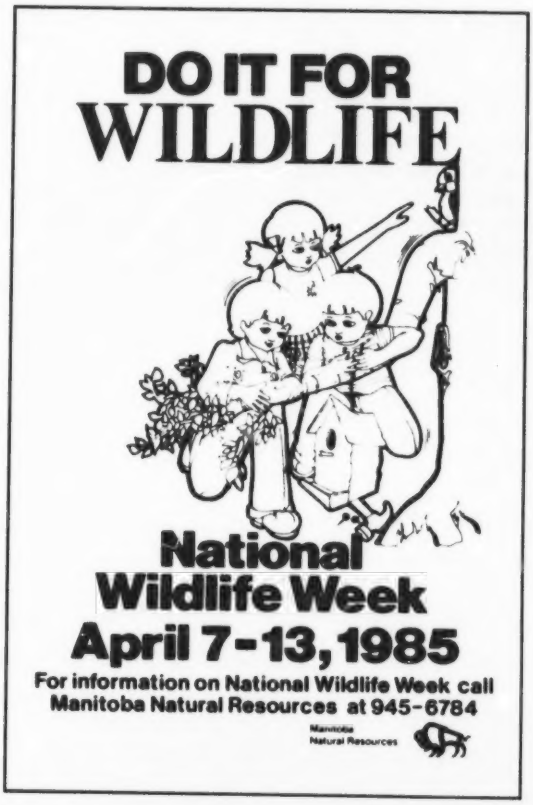
Wayne Roddick
Communications Advisor

Manitoba's National Wildlife Week Working Group



Every time I hear the age-old saying "when the going gets tough, the tough get going," Canada's community of wildlife managers come to mind. As a member of that community faced with fixed budgets, too few staff and ever-increasing workloads, in terms of the number and complexity of problems confronting wildlifers, I marvel at the number of advances made recently in the field of wildlife conservation. Set in "tough" economic times, new and expanded programs of the 1980s are more often than not designed, built and delivered by a number of agencies working in co-operation with one another, incorporating no small degree of innovation and enthusiasm. One such success story, the subject of this article, is Manitoba's National Wildlife Week program.

Manitoba's National Wildlife Week program like most educational programs of the mid 1970s started modestly, involving one or two non-government agencies and the wildlife branch. Year by year it grew in scope and content, attracting an ever-increasing number of participating agencies. As the program grew, co-ordination became as much a concern as activities and projects. Consequently, in 1983 a working group was established to plan, develop and deliver all aspects of Manitoba's National Wildlife Week program.

Consisting of representatives of 10 wildlife agencies and special interest groups, the working group quickly proved that a coalition of organizations with months of planning and organization can far outstrip the accomplishments of a lesser number of organizations working independently and loosely toward the same goal. In short, Manitoba's National Wildlife Week Working Group has been a resounding success in the two short years it's been in operation.

In designing the 1985 program, working group members assembled in September 1984 and met every month through to April, 1985. As in the previous three years, they appointed a wildlife ambassador to promote the week through radio and T.V. public service announcements, appearances at shopping centres and interviews on radio and T.V. shows. Ambassadors, previously including high profile football players and a local magician, have been an integral part of the publicity program.

Wildlife exhibits in major shopping malls have also been a useful way to contact large numbers of people throughout the week. Close to 20 groups have participated each year in Brandon and Winnipeg's wildlife exhibits, reaching an estimated 150,000 people. Shopping centres helped promote the week through newspaper and radio ads. Feature attractions of exhibits included free colouring books and doodle posters (developed by the working group), live ducks and raptors, furbearers' pelts and humane trap sets and a myriad of three-dimensional displays that interest and excite people about wildlife.

Citizens interested in learning more about wildlife during the week were invited to attend a film and speaker festival based on the 1985 theme "Do It For Wildlife." They also could obtain free copies of a teacher's activity book developed by the group for use in classrooms. The book covers such activities as cleaning a riverbank, landscaping for birds, building homes for wildlife, detecting diseased elm

trees and raising funds for wildlife research and habitat conservation. Apart from receiving the teacher's activity book and the Canadian Wildlife Federation teacher's kit, educators were invited to involve their students in the week's doodle poster contest, or its prose and poster contest.

All entrants received attractive stickers and a postcard from the ambassador, and a Certificate of Appreciation for the classroom. Contest winners received their prizes from the Natural Resources Minister, with a photograph of the presentation forwarded to local newspapers and entrants following the awards ceremony. Attention was also drawn to the week through the presentation of awards under Manitoba's Wildlife Conservation Award Program, a new three-category program recognizing outstanding accomplishments in the field of wildlife conservation in the province. Once again, the Minister of Natural Resources presented the awards with appropriate media coverage.

An interesting development in Manitoba's 1985 program came by way of sponsors brought on stream by the working group. For example, Pacific Western Airlines agreed to sponsor the prose and poster contest by donating eight airline tickets to the four winners in junior and senior categories of the competition. Each of the winners was invited to bring a teacher, leader, chaperone or friend with them on the three-day all-expenses-paid trip to Churchill, Manitoba. In addition, Silverwood Dairies covered the cost of printing doodle posters and colouring books. They also ran a National Wildlife Week ad on their two litre milk cartons. The same ad is appearing on Safeway's paper grocery bags for a two-week period. "Mr. Steak," a chain of family restaurants in Winnipeg, is featuring the week and its activities on the restaurant's place mats and billboards. A host of other promotional and media-sponsored events is also in the works.

In retrospect the "tough" have got going, and there's no stopping them. Their ability and desire to tackle new challenges and pursue new approaches to old problems will be repeated many times over in the years ahead. That's good news for Canada's wildlife, and Canadians who value wildlife and have come to view it as one of our most treasured resources.

Highlights of Manitoba's 1985 National Wildlife Week Program

Publicity Program

Ambassador Appointment
John Bonk, Winnipeg Blue Bombers - Public service announcements, (radio and T.V.), shopping centre appearances, radio and T.V. interviews, news releases, etc.

Ads

- Big Fin Magazine (40,000 distribution),
- Manitoba Wildlife Federation's "Wildlife Crusader" (16,800 distribution),
- Manitoba Naturalists Society Bulletin (2,000 distribution),
- Silverwood's milk cartons,
- Safeway grocery bags

Feature Articles

- Winnipeg Free Press (172,000 daily circulation)
- Winnipeg Real Estate News (40,000 weekly circulation),
- numerous rural newspapers that pick up government news releases.

Billboards

- Shopping centres, banks, radio stations, etc.

School Program

Competition

- 20,000 "Do It For Wildlife" doodle posters.
- Postcards, Certificates of Appreciation for 2,500 entrants.
- 5,000 "Do It For Wildlife" buttons.

Educational Materials

- 4,500 Canadian Wildlife Federation education kits.
- 5,000 "Do It For Wildlife" Teacher Activity Books.

Public Program

Wildlife Exhibits

- St. Vital Shopping Centre, Winnipeg (100,000 shoppers),
- Brandon, Portage la Prairie and Dauphin Shopping Centres (50,000 Shoppers),
- 20,000 "Do It For Wildlife" colouring and activity books.

Film and Speakers Festival (5-day period, noon hours and evenings)

- Winnipeg Centennial Library and Museum of Man and Nature.

National Wildlife Week Working Group Members

Wildlife Branch, Natural Resources
Parks Branch, Natural Resources
Ducks Unlimited Canada
Manitoba Naturalists Society
Canadian Wildlife Service
Fort Whyte Centre for Environmental Education
Manitoba Museum of Man and Nature
City of Winnipeg, Parks Branch
Manitoba Forestry Association

Associated Agencies

Canadian Wildlife Service
Manitoba Registered Trappers Association
Manitoba Entomological Society
Brandon Natural History Society
Brandon Wildlife Association
Dauphin Wildlife Association
Portage la Prairie Naturalists Society
Regional Services, Natural Resources

Ted Muir
Wildlife Extension Specialist

Manitoba

Winnipeg International Airports White-tailed Deer Problem

It was the evening of June 12, 1983 and the air fairly hummed with mosquitoes in the fading light as natural resource officer Walter Redlick and wildlife specialist Chuck Dixon carefully glassed an open meadow inside a perimeter fence of Winnipeg International Airport. As their eyes adjusted to the half light the shadows took the form of 21 adult deer; 13 bucks and eight does. With the new fawn crop hidden in protective cover, it was speculated that a minimum of 35 deer were inside the fence, posing a potential hazard to hundreds of aircraft! The thousands of passengers that used the airport each day were probably never aware of the danger they faced... deer-aircraft collisions.

Winnipeg's often testy relationship with white-tailed deer began after 1926, when the City of Winnipeg passed a law affording deer total protection within city limits. By 1983, the city has grown to a population of 500,000 people, covering many square kilometres, with prime deer habitat and a responsive deer herd in several locations, including the International Airport (Figure 1 and 2). Deer had come a long way since 1881 when farmer trappers along southern Manitoba's Red River noticed small heart-shaped hoof prints in the valley mud!

The herd of 35 deer inside the airport complex was but one case requiring Department of Natural Resources action to prevent hazard to people, protect property, and protect the deer. Other efforts to-date have included deterrents to discourage deer raids on gardens, orchards and nurseries, scaring from busy thoroughfares, protection from dogs and attempts at trapping and removal.

The airport situation, however, took top priority and the Manitoba wildlife branch organized a new attempt to drive deer from airport property. Airport authorities agreed to open the fence and provide logistical assistance and the Manitoba Wildlife Federation volunteered many expert "drivers" and transportation to the site.

To enable the deer to escape, the fence was breached. On Friday, August 12, 300 metres of 2 metre chain link fence were laid down and rolled up in the treed area on the west boundary of the airport property (Figure 2), at a cost of $2,000 which included fence restoration

Figure 1: Aerial photograph of Metro Winnipeg illustrating the location of the airport.

following the drive. By Saturday, August 13, all were ready for the exercise.

Seasoned observers of deer behaviour know driving white-tailed deer in predictable patterns is an unpredictable business. Deer can be moved along familiar escape routes to a point but to create a single new escape route and expect deer to use it within 24 hours requires gentle persuasion. Such was the task of the 81 Manitoba Wildlife Federation volunteers who gathered in the early light of day that August morning.

Wildlife staff carefully selected an escape route for the deer, primarily in cover along the west fence. Deer sign along both sides of the fence was heavy and regular communication undoubtedly occurred between separated herds. It was expected most deer would show little hesitation in moving through the area. But, had the fence been down long enough for the airport deer to know that a new escape route existed?

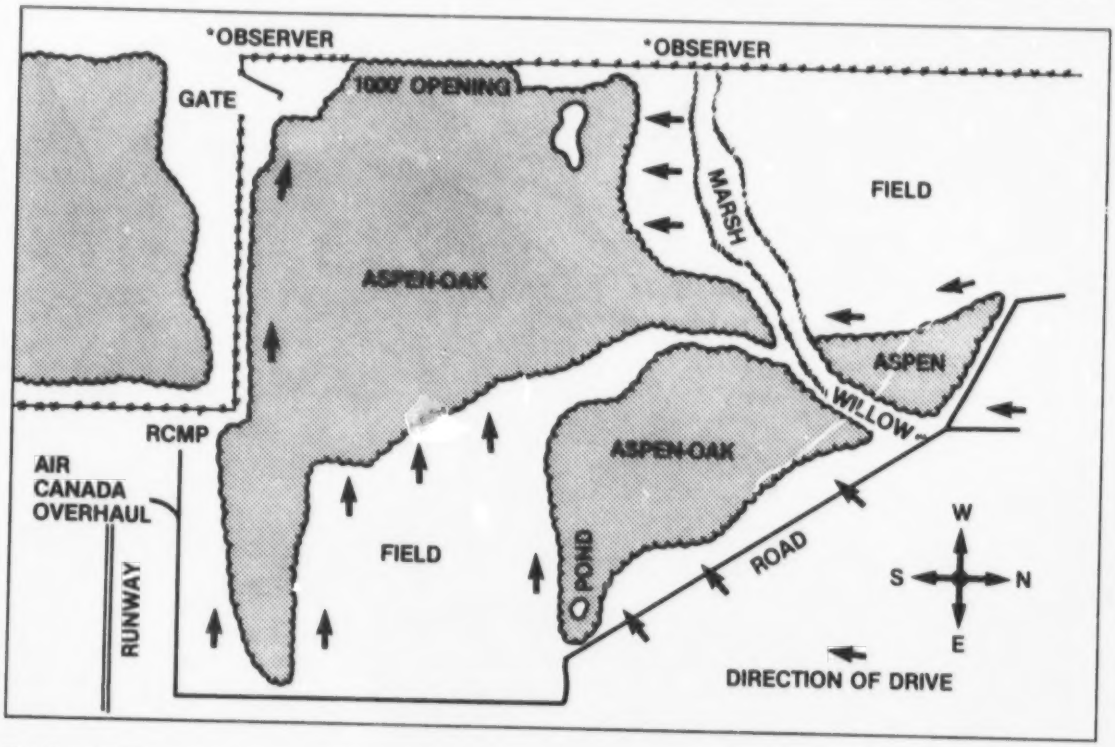


Figure 2: AIRPORT BUSHLANDS: A schematic illustrating the area and direction of the deer drive, Saturday, August 13, 1984.

For the drivers, cover maps of the area were prepared. These indicated the bush areas, the fence opening and most important the directional needs of the drive to squeeze deer into a gap created in the fence (Figure 2). A diary of the operation reads as follows:

06:30 A.M. August 13, 1983. A briefing session was held with the federation volunteers. Four groups of 20 were organized, each with leaders and 2-way radio communication. Instructions to the four squads were to move slowly and quietly through their target areas maintaining visual contact with squad members to the right and left, and radio contact between groups.

07:15 A.M. Three Winnipeg Transit buses were boarded and the drivers taken to the east side of the wooded cover. Buses were essential to minimize traffic and avoid problems. They also insured uniform arrival and deployment of the federation volunteers.

07:45 A.M. The drive began. Within minutes, a red fox, grouse, jackrabbits and deer began to appear in front of the drivers. The semi-circle tightened and more deer appeared headed for the gap. As expected, the last 100 metres were critical.

08:12 A.M. The first inkling of trouble occurred when a doe brushed past a driver who had stopped to extricate himself from an old barbed wire fence. "I could have touched her," he later stated. A hundred metres to the north a large buck erupted from the snowberry and leaped over a young lady while an elderly gentleman was bumped aside by another deer. It happened 10 times in less than 5 minutes.

08:30 A.M. At the gap, observers stationed at both ends were getting sustained action as deer squirted through the hole, took to the willows and cleared the railroad track. Sentinels at either end of the gap counted 19 deer at the south, and 33 at the north, vacating the area. Duplicate counts were possible, but a minor detail at this point.

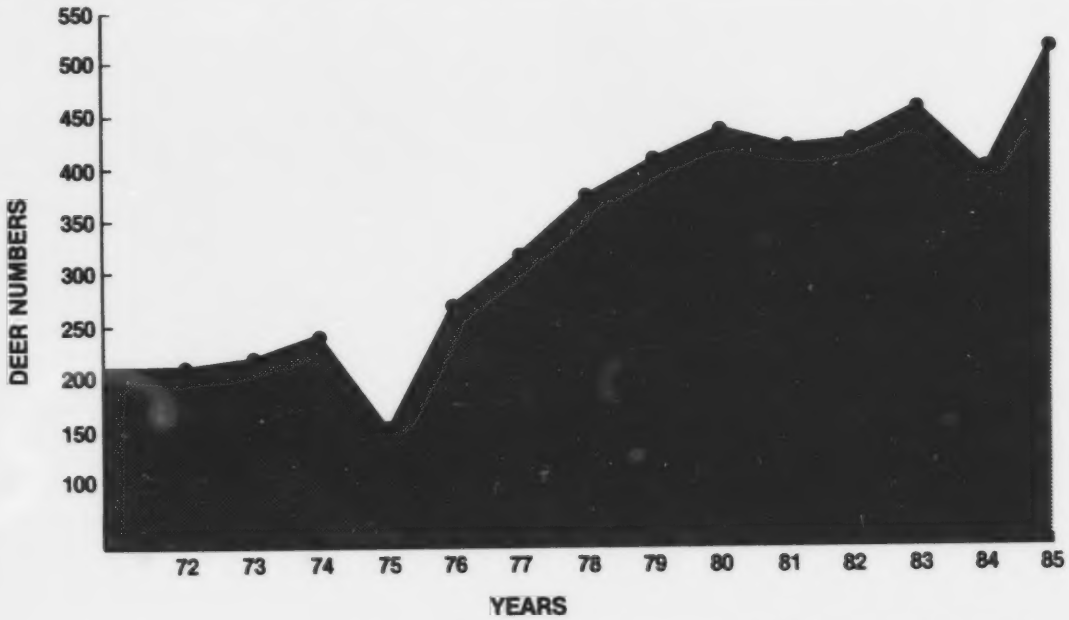


Figure 3: Winnipeg Deer Population Estimates From Aerial Surveys 1972-1985.

09:00 A.M. The drive was completed and the drivers were stationed at the gap in the fence, as, within minutes several deer attempted to return to the airport property they had called home for who knows how long!

09:30 A.M. With a little help, the contractors restored the fence and the three buses were loaded, participants thanked, and the staff and volunteers alike returned to normal Saturday activities.

Growth of Winnipeg's White-Tailed Deer Population

In 1967, deer started to reach high populations, approaching 30 deer per square kilometre, and showed general increases throughout protected habitat areas of southern Manitoba. Favourable weather was the major reason. Although populations declined again during the early 1970s, since 1979, mild winters coupled with a general lack of snow have allowed deer populations to again increase. In 1983 a Winnipeg aerial deer survey indicated the presence of 450 deer in the city. The highest deer population ever recorded was in early 1985 when 511 deer were tallied.

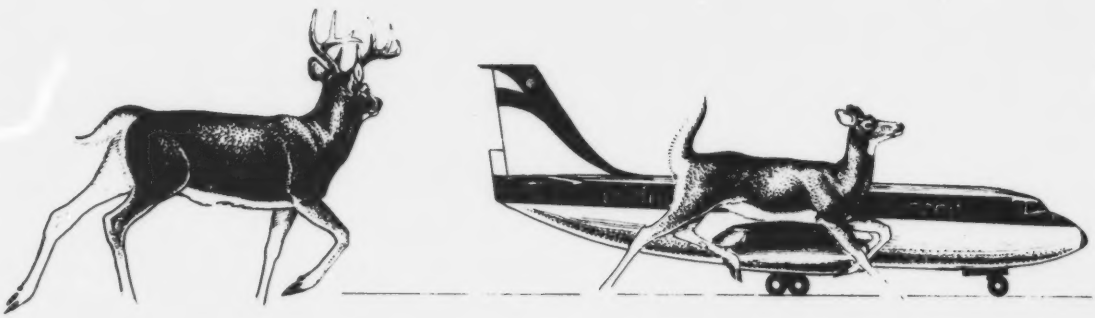
Collisions between vehicles and deer are always costly, and can be fatal. Aircraft-deer collisions are naturally infrequent but safety conscious airport authorities are acutely aware of the implications of a high speed aircraft collision with any object. For example, large passenger aircraft have been practically destroyed by bird strikes. The possibility of aircraft-deer collision posed an unacceptable risk to people responsible for public safety at the airport. Consequently, deer had to be removed and permanently excluded from the airport facility.

The presence of deer on airport property became a more pressing concern during the most recent deer population upturn. Mild winters triggered high recruitment and low mortality has resulted in large herd increases. This phenomenon continues to date (See Figure 3).

Perspective

Efforts to exclude both deer and unauthorized people from Winnipeg International Airport property began about 1962 when a two metre chain link fence was erected around the periphery. The fence separated 12 hectares of bush cover in the facility from more than 400 hectares that occur to the south and west where some 120 deer have taken up residence.

The fence was not effective due to a myriad of management problems. For example, in



winters with deep snow, accumulations allowed deer to walk over the fence. Also, on at least one occasion deer chased by dogs jumped the fence, indicating that its height was marginal at best. In addition, numerous gates were needed and when left open, often unattended, provided ready access to the deer. The deer also appreciated holes cut in the fence by vandals, and waterways by which they could wade under fences that spanned the creeks at four locations. Deer also took every opportunity to crawl under the fences.

In 1978, the concern for people-aircraft safety grew as frequent incidences of deer on runways caused near misses. Airport security patrols recorded ever-increasing numbers of deer seen inside the fence. A policy change from grassland to agricultural management for revenue made habitat increasingly more attractive in the wrong places, since flax and wheat were interspersed with runways. Starting in the summer of 1978, several deer were shot and in May of 1979, the army was called in for assistance in a deer drive to evict 20 or so animals through a waiting gate 400 metres away across open fields. In a day long effort, 80 troops and a helicopter for air cover succeeded in driving no deer from the property. The deer had obviously won round number one. Later that spring, Department of Natural Resources personnel removed eight adult bucks by direct night shooting but gave up after the surviving deer took to heavy cover. In 1982, the wildlife branch was requested by airport management to examine the problem in detail and devise a workable solution. From this liaison came several deer oriented recommendations such as:

1. Remove all bush cover.
2. Repair the fence and add skirting at the waterways to exclude deer.
3. Institute new gate and fence management and upgrade fence security patrols.
4. Add one metre to the height of the existing fence.

In response to the above, airport authorities agreed to implement all recommendations, except the first. In addition to being aesthetically pleasing the bush cover acted as an effective sound barrier. Furthermore, it would cost in excess of $125,000 to remove. The treed area also supported a large and varied number of other wildlife species including, goshawks and red-tailed hawks, horned and long-eared owls, ruffed grouse, red fox, snowshoe hares and red and grey squirrels, to name a few. It was decided the cover must remain.

And so the stage was set for the exciting and highly successful example of co-operation between the public and government agencies described previously. But the case of the deer on the Winnipeg International Airport property could not be closed as yet.

Those planning the drive knew that it would be impossible to chase all deer through the 300 metre wide gap created in the fence, for two reasons: firstly, some deer would be missed by being outside the drive's starting points, and secondly, a great deal of doubling back or breaking through the line by deer was expected. How many deer were left outside the start points is unknown but at least 10 doubled back through, or, in two cases, over the drivers.

So it was that even after the highly successful drive, a tough but practical decision had to be

made to eliminate all remaining deer by direct means. Only this would accomplish the prime objective of total deer removal to eliminate the potential for deer-aircraft collisions.

Thus, the decision was made to shoot the few remaining deer in an intensive, low publicity effort. After initial successful efforts, two deer (an adult buck and doe) later entered the fenced area by way of a dry creek bed. Airport management was notified and took immediate action to prevent a recurrence. Staff rehung page wire from the base of the fence to the dry creek beds. Known as skirting, the technique was effective in preventing further deer entry. On December 3, 1983, the Winnipeg International Airport was declared free of white-tailed deer.

As long as there are white-tailed deer within the city of Winnipeg, there is a potential for deer to be within restricted airport property. Risk factors have increased in direct proportion to the number of deer. High numbers, in turn, are a reflection of mild winters. Deer are attracted to the general area by the excellent food and cover found in the extensive oak-aspen habitats within and adjacent to the airport. The local herd size within a three kilometre radius is estimated at about 120.

The improved three metre fence that surrounds the restricted area effectively excludes deer, providing it can be intact. However, this is unlikely as vandalism frequently occurs even under a high level of security.

Department staff recognizes that limited action by direct removal of airport deer is an ongoing annual occurrence. In the meantime, valuable experience has been gained in effective deer eviction and reduction.

1. Fall removal is preferred due to increased maturity of young deer and leaf drop that increases visibility.
2. In most situations, shooting is necessary. Therefore, excellent marksmanship with utmost discretion is essential.
3. Staff must be highly skilled in deer hunting and knowledgeable of deer behaviour.
4. Staff must possess a high degree of integrity and judgement, and be prepared to spend many hours of effort.

The 1983 deer drive is history, but the memories of a unique exercise and the satisfaction that public safety has been assured live on.

C.C. Dixon
Wildlife Specialist

Listening to our Public

Knowing about people's knowledge, perceptions and attitudes about wildlife is important for planning wildlife management, protection and education programs.

Communicating is a two-way process: speaking and listening. Recently, a number of provincial and territorial wildlife agencies have paid more attention to listening than they have in the past – listening to what our constituents say, think, and do about wildlife. This is good because a large part of wildlife management takes place in a social milieu. Without some understanding of people's knowledge, attitudes, values, perceptions, and ideas, successful wildlife conservation is impossible or, at least, exceedingly difficult.

The Newfoundland and Labrador Wildlife Division has also paid more attention to listening lately. Our listening has taken a number of forms, of which one will be mentioned here.

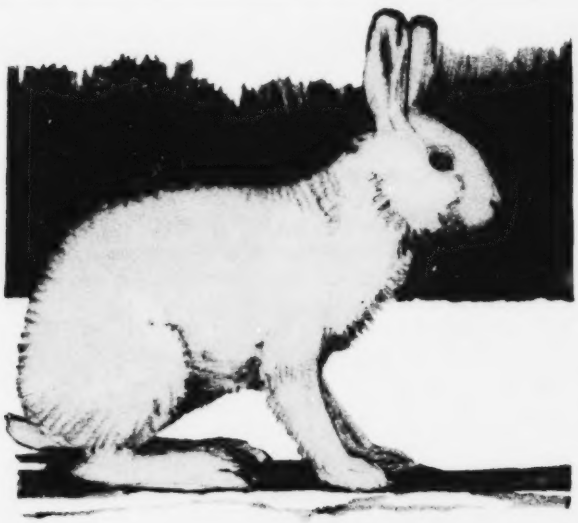
Knowledge and Attitude Survey

During 1982 and 1983 the division contracted a wildlife-biology-turned-social-psychology student, Bonny Hill, to do a province-wide survey of the activities, attitudes and knowledge of our public. The survey is the basis for her M.Sc. thesis. Five hundred randomly selected residents from randomly selected communities throughout the province were systematically interviewed. Interviews averaged 70 minutes.

Many of the questions were intentionally fashioned after those used by Stephen Kellert of Yale University in his work, Public Attitudes Toward Critical Wildlife and Natural Habitat Issues (1980), so that comparisons could be made with the American study.

Some examples of the questions in our survey include:

- Which of the following animals are considered to be endangered in Canada? (followed by list of animals)
- Would you favour the following types of development if it were known that caribou habitat would decrease? (followed by list of types of development)
- True of False?
  The Great Auk and Labrador duck are now extinct.
  Spiders have ten legs.
  The manatee is an insect.
  Moose were introduced to Newfoundland by man.
- Agree or Disagree?
  People should have car access to scenic areas even if wildlife are disturbed by the traffic and noise.
- Do you disagree with hunting?



- Do you or have you ever birdwatched?
- What do you think ATVs should be used for, and who should use them?
- Do you think the wildlife regulations should change in any way?
  How?
- What do you think the wildlife division should concentrate on?
  (followed by list of topics)

In all, 457 variables were assessed. Believe it or not, the response rate was 85 percent and the length of the interview was not a limiting factor; in fact many people voluntarily indicated that they were pleased to be able to express their opinions.

The results of the survey were enlightening. They gave us hard data to base our planning on rather than someone's gut feelings for the "pulse in the street". We are able to make demographic profiles of the respondents so that future programs can be customized for the appropriate age, sex, education and activity groups. The data also allowed us to determine differences of opinion based on area of residence.

A number of questions were asked about hunting. Forty-six percent of the population said they had hunted at sometime in the past. Most of these 55 percent were after moose or caribou. The primary motivation for hunting was for meat (67 percent) with sport hunting a secondary motivation (27 percent). Eleven percent of respondents said they were opposed to hunting, with their primary concern being that it is morally wrong to kill animals for sport. The minimal anti-hunting sentiment that does exist is centered in the most urban part of the province, the Avalon Peninsula. Only 0.6 percent of the survey population found the conduct of hunters to be a reason for disagreeing with hunting, so, the so-called "slob hunter" does not appear to be a major factor contributing to an anti-hunting sentiment.

People's interest and concern for wildlife varied considerably. For example, when asked which types of animals they would favour protecting in the face of increasing the cost of an energy development project, 92 percent said they would want Atlantic Salmon protected, while 35 percent wanted to see the cougar protected. Only 19 percent saw any value in protecting a snake. Most support for cougars and snakes came from the young and the well-educated.

People's concern for caribou was very high. There were no types of developments that were favoured if it meant that caribou habitat would decrease.

On the knowledge questions, scores varied depending on whether the questions were on Newfoundland, general wildlife or on world topics. They responded correctly to 69 percent of the Newfoundland related items, to 52 percent of general knowledge items and to 40 percent of the world items. Education and par-

ticipation in wildlife-related activities were important factors in determining people's scores.

In response to questions about all-terrain vehicles, 72 percent of respondents said that they should be restricted from some areas of the province, however, only 5 percent wanted to see ATVs limited to existing trails. Seventy-five percent of the survey population believed that ATVs caused problems for wildlife.

On questions about snowmobiles, the percentages varied a bit but the general feeling was much the same as for ATVs. Respondents want to see restrictions on their use and access to certain areas.

A series of questions were on the work of the wildlife division. Over half of the respondents felt that regulations were not well enforced and 83 percent of these said this was because of too few protection officers. Over 80 percent wanted to see the division concentrate on increasing protection, improving management and increasing public education.

When asked what types of wildlife we should focus on, they ranked their preferences as follows - 1. Moose, 2. Caribou, 2. Endangered Species, 3. Rabbits, 4. Aquatic Furbearers, 4. Seabirds, 5. Bears, 6. Raptors, 7. Foxes, 7. Lynx, 7. Songbirds, 8. Insects, 9. Wolves.

Forty-nine percent of the survey population said that they wanted to have more say in how wildlife is managed. Forty-six percent said that regulations should be determined by the government and the public together, 24 percent favoured the people determining them, 21 percent were prepared to leave it up to government and 3 percent said there should be no regulations. When asked how they would like to be involved, opinion surveys ranked first and public meetings were second.

People favoured television (77 percent) as the best medium to be kept informed about wildlife. Magazines were a distant second with technical reports and public meetings following that.

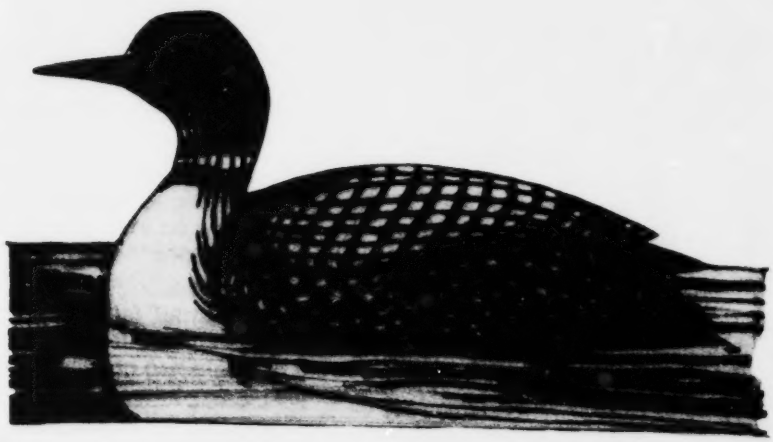
Respondents were concerned about poaching. Eighty percent said it was common and nearly 70 percent said it occurred in their community. Sixty-one percent said they would report poaching if they saw it. This would have been higher were it not for the fear of retaliation that many people expressed.

Conclusion

These are some of the highlights of the survey. The important questions now are – What are we going to do with the information? How will it affect our policies and programs?

Some results are already being used. For example, people's response to the question about environmental education in schools is being used to encourage the integration of Project Wild with the curriculum. Other results are being used to promote the establishment of regulations to control ATVs and snowmobiles.

The data will affect other programs and policies more slowly. Subtle alterations will oc-



cur in our thinking about existing programs. We will refer back to the survey to find evidence of public opinion and attitudes for or against new ideas. If similar studies are done in the future on a regular basis, we will be able to monitor, on a broad scale changes in attitudes and opinions which may reflect the success or failure of our own programs.

In Ms. Hill's introduction to the survey she says:

> "Traditionally wildlife departments have developed their management plans solely around biological facts derived from field research. These plans then evolved to incorporate political policies and human demographic pressures. The need for a strong basis of facts about wildlife and the environment was recognized but little consideration was given to the human aspects of wildlife management. Most wildlife managers are now realizing it is important to examine public needs, perceptions and knowledge, in order to develop a public support base. As well, wildlife policy must now be sensitive to changing social and economic conditions in order to maintain viable wildlife populations while allowing for a variety of human uses."

This wildlife agency will continue to listen to its constituents. We believe public support is necessary for programs to be successful. But this is not to say that we should become subservient to public opinion polls. It means that in order to effectively manage wildlife we must be aware of the social context in which management takes place.

Dennis Minty
Coordinator
Information & Education

Communicating About Wildlife... A Northern Perspective

As the human population and development of the non-renewable resource industry expand in the Northwest Territories, there is greater pressure exerted upon renewable resources. Public understanding of renewable resource problems can help reduce or eliminate the effects of these pressures. By increasing the public's understanding and involving them directly in the decision-making process, their support can be gained for the development and application of renewable resource management.

A greater comprehension of renewable resource issues can be obtained by the formation of close communications between the Department of Renewable Resources and the public. However, communication is complex when dealing with few people from several different cultures over an extensive area.

Background

The land mass of the Northwest Territories is 3,376,698 kilometres, or about one-third of the total area of Canada. The population of approximately 45,000 people is spread throughout this land mass, and is composed of two major ethnic elements - native and non-native. It is the only Canadian jurisdiction in which people of aboriginal descent form the majority of the population (approximately 57 percent). Renewable resources have traditionally been the basis of northern economy and culture, and people here continue to depend upon them for their livelihood.

The lifestyle of the native residents has changed greatly during the last 50 years. In the past, transportation was not very fast and hunting equipment was not as efficient. Today, with the use of snowmachines, all-terrain vehicles, motorized boats and high-powered rifles, wildlife is more accessible and easier to obtain.

Technological changes have developed at a faster rate than philosophical changes. The resulting increased pressure on wildlife supports the need to develop management practices.

Residents of the Northwest Territories are concerned about the future of their renewable resources and they wish to participate in the management of their renewable resources; therefore, they should have the opportunity to develop the knowledge and skills required to formulate management decisions.

The Department of Renewable Resources is assisting the people in making choices for their future. We set policies and initiate studies, but in the final analysis, government is controlled by the people. It is possible that a public unaware of the requirements of the wildlife resource, or the opportunities for the development and use of this resource, may not support management planning. It is human nature to reject what is new or not understood. By communicating with the public, we can discuss the values of wildlife management and work together to manage wildlife for the benefit of present and future generations. Under the guidance of departmental goals and objectives we will respond to the changing conditions of the North.

Departmental Goals and Objectives

The goals of the Department of Renewable Resources are to maintain the diversity and ensure long-term productivity of renewable resources for the benefit of residents; to increase the involvement of the residents in renewable resource management; and, to protect environmental quality. A number of objectives have been designed to specifically promote measurable progress towards these goals.

With relation to the importance of the communication process, the following objectives are applicable, and are listed in order of priority:

1. Strengthen public understanding of, and support for, the conservation ethic.
2. Encourage development of educational programs which will enable native residents to participate fully in the delivery of departmental programs.
3. Establish a system which provides renewable resource users with the means to influence departmental policy, programs and legislation.
4. Devolve certain departmental programs to regional and community organizations.

The Northwest Territories is divided into five regions: Fort Smith, Inuvik, Kitimeot, Keewatin and Baffin. Within each, the regional office is responsible for ensuring that management practices and studies are carried out to

facilitate the achievement of the departmental goals. The regions in turn report to, and receive direction from, the department's headquarters, located in the territorial capital, Yellowknife.

The need for clear, well-defined inter-departmental communications is fundamental for its successful operation in such a large, diverse jurisdiction. The achievement of a uniform direction is important for gaining public participation and support, because the internal acceptance of an idea is necessary before the external application can succeed.

Communicating with the Public

Differences in language represent a major barrier to communication. No matter how clearly, simply and straightforwardly information is presented, it is useless if the public does not understand the language in which it is produced. In the Northwest Territories, the Official Languages Ordinance (June, 1984) recognizes six native languages (Inuktitut, Slavey, Dogrib, Chipewyan, Loucheaux and Cree), and two national languages (English and French). In addition, even though people from different communities may use the same language, the wide variety of dialects in languages may further complicate communications.

When written material is translated, it is important to translate it into the dialect used by the people. This is why many translations are handled at a regional level, rather than from headquarters. This also allows for a more personal approach, because material can be written as it applies to a particular individual or group that it directly involves.

The development of renewable resource management has resulted in the development of a new vocabulary to describe the multitude of new subjects. Words and terms, once foreign to the native people, are now very much a part of life in the north. Difficulties in translations arise when there is no comparable native word to express the biological word, or when translators cannot grasp the concept that is being expressed. Similarly, many native languages have a large number of terms that describe things that are traditionally important to their culture; the English language lacks many of these.

In the Northwest Territories, it is an accepted fact that meetings held with the public will often involve the presence of an interpreter. It is the interpreter's responsibility to take a speech from the "source" language and explain it in the "target" language.

A summary of the Wildlife Ordinance is available in three different languages: Slavey, English and Inuktitut.

If a meeting is to have simultaneous translation, it will involve the use of expensive, technical equipment and the presence of a trained interpreter. A majority of meetings are held using one interpreter or more (depending on the different languages involved) to act as a spokesperson for a speaker. Both methods are highly effective for communicating, but the latter is a slow process and makes for lengthy meetings.

The department makes every effort to staff permanent positions with local native residents. Employing people who are familiar with the lifestyles and language of the residents has obvious advantages, primarily in their ability to communicate directly with the public.

With the development of a renewable resources technology program at Thebacha College in Fort Smith, northern residents now have the opportunity to be trained in a two-year course specifically designed for northern application. In 1984, the department offered support by making four renewable resource officer training positions available only to graduates from this program.

Often the differences in cultural and educational backgrounds of the people involved adds to the complexity of a literal word-for-word translation. Interpreting for a discussion between a biologist and a group of hunters is complicated when the biologist employs the use of statistics to support his concept. For example, explaining how the information gained by flying specific transects for a caribou aerial survey will be applied to a mathematical for-

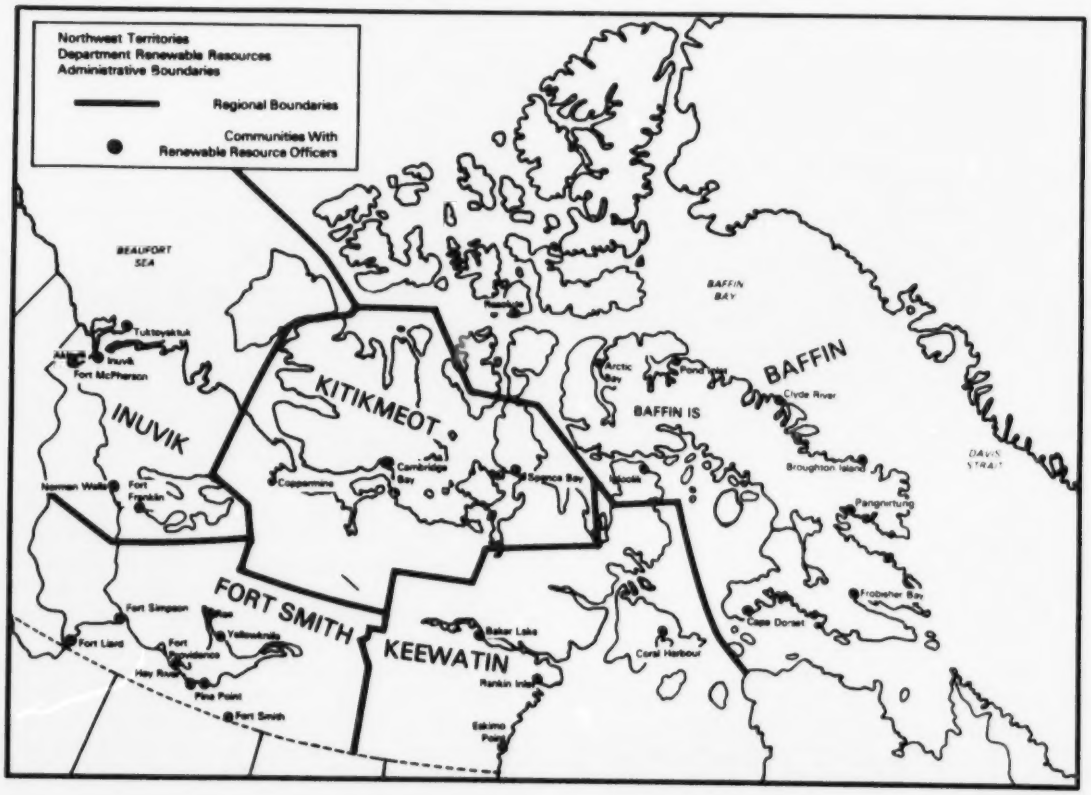
mula for a total herd population estimate, is often a very difficult and tedious task. Patience and a desire to comprehend the information is required by all individuals involved.

Methods of Communication

Since the early 1970s, the formation of local Hunters and Trappers Associations (HTAs) has been actively encouraged and financially supported by the department. The formation of 55 HTAs throughout the territories demonstrates the interest and desire of the public to participate in wildlife management issues.

The HTAs elect board members to represent hunters and trappers in their community. In the Fort Smith and Inuvik regions, many communities have chosen their Band Councils to represent their interests. Renewable Resource Officers maintain regular communication with these organizations to hear community concerns, answer questions, and to keep them informed of departmental activities. We rely on these organizations for local input to management decisions, and consequently it is important that they are kept well-informed.

Education also plays an important role in developing public understanding and support of management programs. The involvement of the Department of Renewable Resources in the educational process is accomplished through both passive and active means. The former refers to the co-operative efforts of our department and the Department of Education to produce materials relating to wildlife for use by teachers in the schools. Active participation involves the personal appearance of renewable resource officers in the schools on a regular basis. Their presentations may vary from an explanation of the natural history of wildlife species to more complex presentations explaining how and why wildlife is managed. The desire for primary resource-users to play a greater role in wildlife management can, and will, be accomplished if future generations are kept informed and motivated to achieve this goal.



The large size, the low population, and the number of different native languages used in the Northwest Territories results in a complexity in the communication process.

When wildlife studies are conducted, every effort is made to hire and involve the local public. Local HTAs are always consulted prior to the commencement of any management projects. An aerial survey, a specimen collection, or a gyrfalcon banding project is that much more acceptable when individuals from the communities participate. Not only does this generate a source of wages, but it also creates a better understanding and appreciation of wildlife programs. Another positive benefit for managers is the valuable information concerning the movements, distribution and habits of wildlife species which local people can often provide.

Direct public contact and involvement may not always be possible, so the department makes use of other media to communicate with the public. Audio-visual productions are a very effective tool for communicating about wildlife. Films and videotape programs are opening new doors for actually demonstrating how wildlife studies are accomplished.

A film recently produced about the caribou tagging project in Baffin Island not only allows the hunter to see how the ear tag was placed on the caribou he shot, but more importantly it explains the purpose of the tagging project. By actually seeing a wildlife management program in operation, many questions are answered. Television is also used for short information spots about various wildlife species in the Northwest Territories.

The production cost of audio-visual media can be a limiting factor. In some instances, it is possible to work together with local television stations, such as the Inuit Broadcasting Corporation and CBC North, to reach the local public. Also, certain wildlife issues are area-specific, and it may not be cost effective to produce large scale productions. Developing "homemade" videotapes has proven to be very effective in local situations.

Radio represents an inexpensive, wide-reaching method of communication since local radio stations are present in most communities throughout the Northwest Territories. Radio offers an opportunity for local renewable resource officers to discuss relevant issues about wildlife utilized by their community. They are able to tailor their information so it best suits the situation in their area. Radio shows may vary from a reminder about the opening of the trapping season, to a question and answer talk show about brucellosis and caribou.

Like so many other wildlife organizations, the Department of Renewable Resources will continue to produce printed matter as a means of communicating with the public. The uniqueness of material printed in the Northwest Territories remains in the languages it is produced in, the wildlife species it deals with, and the people it is produced for.

Conclusion

The Department of Renewable Resources produces a variety of materials and information regarding wildlife and its management. Of particular importance are the methods the department employs to relate this information personally to the special needs of the many different user groups. This is perhaps one of the most important factors that links this government agency with the public. The department is managing wildlife for the long-term benefit of the residents in the Northwest Territories. We must continue to communicate with the public, and thereby work together to produce successful management programs for the future.

Mary Tapsell
Conservation Education Officer

Now We Listen More

Threats, harassment and destruction of personal property characterize early attempts by wildlife biologists to introduce big game management to Nova Scotia. The province's 800,000 residents by and large, still maintain a tradition of sturdy independence and close ties to the land and its fish, wildlife and forest resources.

Forty-four percent of the population lives in communities of 1,000 or less, and most of the rest have close relatives living in the country. Over half the forest land is in small private ownerships of less than 1,000 acres. Even a Halifax apartment dweller who couldn't survive without a flush toilet is thrust into Nova Scotia's wilderness only 20 minutes from downtown. Somehow, everyone has gained environmental experience of some sort, and most are keenly interested in maintaining the rural nature of the province and the people's traditional use of its resources.

Where else in Canada can a small group of landowners make the largest natural resource industry in the province conform to the beliefs and opinions of the public? Politicians decided that aerial spraying of chemicals for the control of spruce budworm was out of the question in this province because of the public concern about perceived risks to health, property and wildlife. As a result, the province rejected professional advice and lost a seven-year supply of wood to the budworm, in three or four years. Since then, forestry has continued to have a high profile and will probably benefit from public scrutiny in the long run.

Communication about wildlife also has to be predicted on the fact that the public's experience - however unlimited - is more real and important to them than a government expert telling them "the way it is." Communication has to be a two-way street.

The Department of Lands and Forests has a forest resources education section permanently staffed with a forester (manager), wildlife biologist, technical writer, field representative and two clerks. With a regular budget of just over $150,000 for programs, we provide a central education and information service for public and staff. This is carried out through an inquiries desk, brochures, a motion picture program, audio-visual library, production of exhibits, posters and signs, special advertising, courses, walks and talks. The service complements and supports the extensive public information function performed by all department staff.

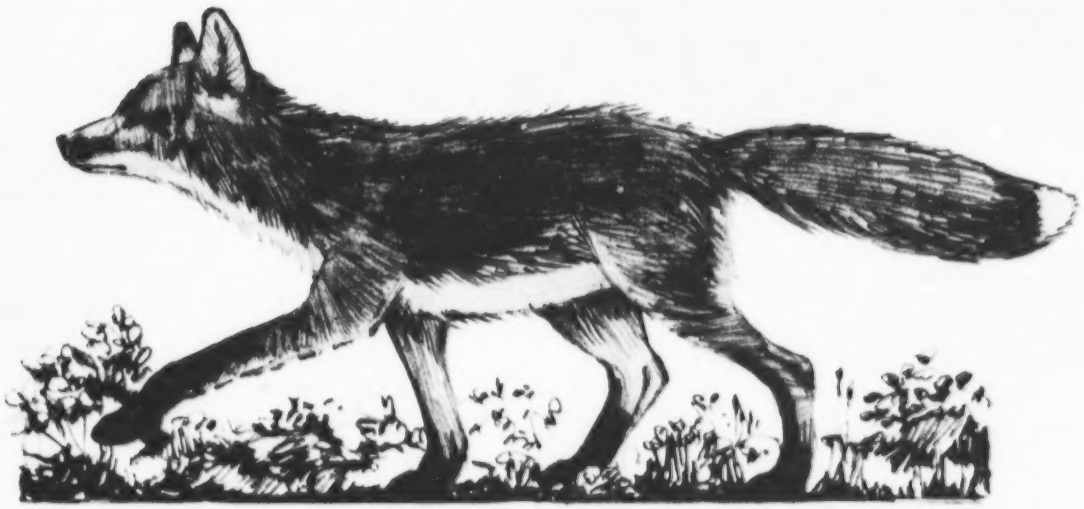
Managers of big game, waterfowl, sport fisheries, upland game and furbearers, and non-game, direct provincial wildlife programs from the wildlife division office. They head-up research designed to monitor wildlife populations and make management recommendations to government. The division staff provide resource information to the public, interpreting their research results in the light of national and international concerns. For example, recent public interest in acid precipitation and its effects on the province's already overtaxed fish population, generated a major magazine article by the fisheries biologist and required that pH receive more attention in our lake survey program. Public requests for lake survey information have increased dramatically in recent years.

Division staff also generate Technical Notes explaining their research to professionals and interested sportsmen.

Complementing the managers are six regional biologists who have close contact with the public. Their daily communications on a one to one basis with the public are most valuable in managing wildlife.

They may deal with the farmer who has coyote depredation problems or they could also be involved in the routine checking of hunting and fishing licences. They tactfully explain to the father of a teary-eyed daughter that it is not feasible to rehabilitate the seagull they found with a broken wing. They speak to special interest groups and the media with the authority of personal experience and add captivating interest with local anecdotes. The importance of regional biologists for wildlife communications is underlined by the fact that up to three-quarters of public contacts at our district offices are fish and wildlife related.

Nova Scotia has always had an integrated forestry/wildlife communications program due to small numbers of staff who had to cover all aspects of the resource. The department's overall objective is to portray wildlife as a forest resource, the abundance or absence of which depends on the condition of the land. All staff develop this message, foresters and biologists alike, whether consulting with woodlot owners on their forest management



plans or guiding a class of city children on a woodland walk.

Our most important wildlife information medium is the quarterly magazine N.S. Conservation. Subscription to this free quarterly, full colour magazine is available on request. During our eight years of printing the mailing list has fluctuated between 17,000 and 22,000 names. To control the cost we conduct a subscription renewal campaign every two years to ask all subscribers if they wish to stay on the mailing list. The number distributed usually drops about 20 percent after a renewal, then slowly builds to its original level.

With each issue we are able to reach over 60,000 readers for about 10 cents each. They are mostly hunters and fishermen, but also include members of the Nova Scotia Bird Society, Trappers Association, all schools, Members of the Legislative Assembly and licence vendors.

Our aim is to provide facts. We leave "hook-em and shoot-em" stories to the commercial media preferring to keep to a more scientifically objective editorial policy. With little interpretation we give the results of wildlife research and surveys and explain the theories and objectives of wildlife and forestry management plans.

We introduce readers to the province's parks and wildlife management areas and try to explain such scientific controversies as the recent black duck season adjustments. It is easy reading which basically converts scientific jargon into understandable concepts. Frequently, we run a question-and-answer column where we collect written enquiries from each of the biologists and share the answers with our readers. A readership survey confirmed that this was a very popular technique.

Reader support is tremendous and is exemplified by response to the government's 1983 attempt to curtail printing N.S. Conservation as an austerity measure. The mail rolled in. "More mail," said the Deputy Minister, "than we have ever received on any other issue." The decision was reversed and the mailing list continues to grow.

We also have a dozen publications with wildlife titles to provide detailed answers to individual requests ranging from deer to coyotes.

Throughout the province's school system the Department of Lands and Forests is famous for its film showings, which have been a regular feature since 1958. In the beginning the major purpose of this program was forest fire prevention. In a very short time the list of film titles grew to include forest management and wildlife conservation. Staff members with projector and films in hand visited schools and lumber camps, often with the help of a portable generator.

Today we are reaching some 60,000 students whose parents will remember our visits. But these days, heavy curriculum loads in junior and senior high schools restrict staff visits to the elementary grades.

Each year, on average, we complete one 16mm film on a forestry of wildlife topic. The most recent, "Eagles of Bras d'Or," explains the life history of Nova Scotia's largest bird of prey and details the department's on-going research on the bald eagle. We have a library of more than 450 16mm prints of 262 titles that are available for loan.

Perhaps we can all remember a single incident in our public school experience that, above all other influences, sparked to develop a career in wildlife. With our school visits we cannot hope to conduct an extensive wildlife program, but by presenting a quality program by a qualified, enthusiastic instructor we hope to at least generate an interest in wildlife. Those kinds of instructors are rare, but we feel we have two or three who are presenting our program that way.

Media advertising is especially important in reaching most of our 100,000 hunters. For the past two years we have a very successful television message encouraging all recreational land users to ask permission of the landowner before using their land. Compliments have been coming from both landowners and land-users and thus one project accounts for about 10 percent of our budget.

We also find that major displays and exhibits are cost-ineffective. As a compromise we use a display system that allows us to change the text and photo panels easily, and keep the total exhibit small. We have a number of exhibit topics available on request for small fairs, shopping malls and schools, that can quickly be transported and set up with little manpower, since they will stand on their own.

Our largest wildlife exhibition is the Provincial Wildlife Park in the centre of the province at Shubenacadie. Over a quarter of a million people annually stroll the tree shaded paths to view the caged animals there. A permanent forest resources exhibition building at the entrance to the park may attract one in 10 of the visitors, but the people flock from all over the province mainly to see the live animals. The department has operated two small satellite parks for the last few summers to make live animal displays more available to people in the eastern and western ends of the province. Our wildlife parks are famous. There probably isn't a school child in the province who hasn't been on a school field trip to a wildlife park.

Initially, one could never tell what park visitors got from their visits because there was little feedback. But two-way communication between the department and the public has developed and grown in the last 10 or 15 years. Better educated and more experienced hunters and fishermen are now making recommendations through the Nova Scotia Wildlife Federation, the Trappers Association of Nova Scotia and the Bird Society. And we listen to and request their advice.

"Fifteen years ago," says our upland game biologist, "we were very arrogant and wet behind the ears. We wanted to introduce ptarmigan to Scaterie Island off Cape Breton, so we did what we pleased and didn't ask anyone for their opinion." But now, as we are poised to introduce wild turkeys to the Annapolis Valley, the department biologists make sure that the Department of Agriculture, farmers, the Bird Society and anyone else interested in the project knows exactly what the plans are and has a voice in the introduction policy.

The Nova Scotia Wildlife Federation is our major ally in wildlife communications. As well as acting as a sounding board for wildlife management proposals, their 8-10,000 voluntary members conduct their own education projects. For example, the Port Morien Wildlife Association on the Eastern tip of Cape Breton Island runs a summer visitor centre with photos and artifacts relating local wildlife features. The Kings County Wildlife Association in the Annapolis Valley involves school children in their fish habitat improvement projects. And for the last few summers the West Pictou group has headed up the Conservation School for young boys.

But the Federation's major role is in providing qualified instructors for the province's compulsory hunter education program. Federation members who volunteer their time, donate the course fees to their home clubs. Part of the course involves a lesson on wildlife populations and wildlife management.

The Trappers Association of Nova Scotia (TANS) is building within its ranks a core of

volunteer instructors that will eventually run the compulsory trapper education program we hope to begin this fall. We are providing the tools and the trappers will conduct the course. For example, we have just completed a major slide-tape presentation on trapping in Nova Scotia which association members are showing to local public audiences to support and explain wild fur harvesting.

Perhaps no other public group has received as much department attention as TANS. Volunteers among the ranks of trappers have provided the animal carcasses which department biologists need for investigating population trends. Results of their studies regularly fill the annual Trappers Newsletter which the department prepares for trappers. Trappers have intense interest in every aspect of the animals they pursue; we listen to their advice because they have a wealth of information. The newsletter is a valuable link between government and trappers.

We all know that habitat protection and improvement is the best way to conduct wildlife management. This is another area where Nova Scotia can point proudly to an improvement in communications. Only 15 years ago, our waterfowl biologist, at a meeting of forestry personnel, recommended they leave more dead trees in their silviculture projects for the benefit of birds that lived in the forest. The snickers that ran through that crowd have echoed for many years. But the report of the Royal Commission on Forestry in Nova Scotia in December 1984 would make wildlife habitat enhancement obligatory on all those harvesting forest products.

There have been subtle and often shocking changes in the thinking of foresters about the effects of forestry on wildlife. They are now waiting for biologists to give them the information to work with. Depending on how the government reacts, the Royal Commission may open fruitful ground with improved communications between foresters and biologists.

Since small private woodlots constitute over half of our forest land, wildlife is bound to benefit from small-scale forest management. Under current assistance schemes woodlot can set wildlife habitat improvement as their goal for a forest management plan. As we continue to bring more owners into this program, perhaps we can even sell forest management with the promise of improved wildlife populations. The greatest challenge for future wildlife communications in Nova Scotia will be to achieve a truly integrated program of forest/wildlife management.

Anthony P. Duke
Wildlife Biologist

The Written Word on Wildlife

It is a fact of life in any wildlife agency that the public at large looks to us to provide information on a wide variety of topics: biology, regulations, policies, and so on. While this is to be expected, it can draw professional staff away from management programs to a considerable degree. Furthermore, proficiency in scientific matters is not always accompanied by communication skills or ease in dealing with people and dispensing and clarifying information.

In the Wildlife Branch of the Ontario Ministry of Natural Resources, we have developed a way of dealing with this which works for us, and might work for others. One member of our permanent staff comes not from a scientific, but from a liberal arts background. When correspondence comes into the branch – and, as we all know, the volume can be considerable – this person secures the necessary information and composes the replies. These are then approved or amended by those in charge of the program concerned. Last year in excess of 800 enquiries were handled in this manner, and our scientists were free to pursue the work for which they were actually trained and employed, such as species-policy and program development and analysis of population-monitoring programs.

On occasion, our scientific staff, for a variety of reasons, will prefer to handle particular enquiries themselves; but the majority of our enquiries are dealt with in this way. It helps that our Information Officer has a life-long interest in natural history. It is virtually impossible to communicate convincingly and effectively about matters of little or no interest or concern to the writer.

The range of subjects dealt with is very broad. This is indicated by the following exerpts from letters originating in the branch.

At times, all that is required is simple, factual information:

> "Our records indicate that this band was placed on an adult male red-tailed hawk on August 20, 1980 at 3:20 in the afternoon at the Toronto Airport. The bird was subsequently released at Niagara Falls."

At other times, we must clarify things and explain that we offer such clarification on a regular basis:

> "As you state, trapping is of value in Ontario both economically and ecologically speaking. Many people are not aware of this, and for a variety of personal reasons they oppose trapping. The Ministry makes every effort to provide the best possible information to the public so that a balanced view of trapping may be encouraged.
>
> Each year during National Wildlife Week ministry staff members are asked to address school groups, scout groups, and other youth groups.
>
> Such requests are also received at other times of the year. These requests are opportunities for us not only to educate the young people of Ontario about the value of wildlife, but also to help them become aware of the legitimacy of such activities as hunting and trapping. By thus reaching our future generations, we hope to ensure that trapping will continue to play its historic role in Ontario."

Handling complaints is an important part of communication. In many cases complaints arise from the all-too-human resistance to change. Giving the rationale for the change may help to dispel the resistance:

> "The new selective harvest system for moose is of proven effectiveness in such diverse places as Sweden and Saskatchewan. It is based on the premise of harvesting a planned number of adult animals (bulls and cows), given the status

and health of the herd in local areas. Fewer than one-half of all calves born in any given year can be expected to survive their first winter, and moose do not come into prime breeding age until their third year. These considerations make it clear that it is the prime breeding animals that must be conserved if the herd is to increase, and that calves are the most expendible component of the herd."

We must also be prepared to give the rationale for not doing certain things:

"The bounty system was discontinued because it had never proved effective in dealing with predation problems. Such problems nearly always involve particular offending animals or groups of animals. Control measures directed at a species as a whole often overlook these particular animals. In areas where problems are perceived, local authorities are encouraged to contact the district office of the Ministry to arrange suitable control measures without resorting to the expensive and effective payment of bounties."

An important part of our message to the public is that we neither encourage nor discourage activities, but simply respond to public demand:

"While we understand that many people are opposed to sport hunting, the fact remains that there is still considerable public demand for hunting opportunities. As long as that demand exists, we are obliged to respond to it, provided that such recreational pursuits are not detrimental to Ontario's wildlife populations."

The point must also be made that the purpose of regulations is to protect the resource, not to prohibit activities for personal or philosophical reasons:

"Legislation to control the taking of amphibians and reptiles was introduced by the Government in 1980 through an amendment to the Game and Fish Act. We recognize that in some areas turtles may be in difficulty, and we have undertaken a study to determine how many are being taken and by whom. If there is a problem which can be identified and which requires any regulations to be made, they will be recommended on the basis of the need to control the harvest for the conservation of these valuable animals."

Sometimes we have to say why we are not going to change things:

"Now that it is in place, we do not anticipate that the selective harvest system for deer will be eliminated in the future. What will happen is that as the herds increase, more tags will be provided for antlerless deer. This could mean that eventually everyone who applies will receive a tag, as is already the case in some of the archery-only areas. This would, in effect, be a return to "any deer" hunting, but the selective harvest system will probably remain in place in case it becomes necessary again to control the harvest of antlerless deer."

People often do not have the necessary background information to understand the conditions under which we must manage wildlife resources:

"It is important to understand that deer are at the northern limit of their continental range in Ontario. In fact, before settlers cleared the land, deer were only found in what is now Ontario in the extreme southern part of the province. This means that they will probably never be as plentiful in central Ontario as they are in western New York and the immediately adjacent part of Ontario."

Contentious issues, such as wildlife in captivity, are a source of endless enquiries:

"In Ontario, it is illegal to keep native deer or to sell or buy venison from native deer. You would, therefore, not be able to use white-tailed deer for the purpose you have in mind. Please note that it is our interpretation that this prohibition applies to the species, regardless of the origin of the actual animals. Even white-tailed deer from elsewhere cannot be kept or sold legally in Ontario."

Many people who find or rescue injured wildlife turn to us for advice, or, as in this case, an explanation as to why the attempt with a bird failed:

"The probability is that you did nothing wrong. Certainly the care which you gave

to it as outlined in your letter appears entirely appropriate. Birds, however, are very susceptible to shock, and many die when captured by a cat or other predator before actually being harmed. In the case of birds which are rescued, they often die later, never fully recovering from the shock of capture."

In urban areas in particular, unrealistic and idealized views of wildlife develop, and these must be dealt with:

"As distasteful as some of us find it, death is a fact of life in every part of the natural order. Some creatures must die that others may live. Our concern therefore must be to prevent unnecessary suffering, rather than to eliminate killing. A further consideration is that animal numbers must be controlled to prevent starvation and disease. Death from such factors is far more prolonged and agonizing than death caused by hunting and trapping."

Or:

"We realize that at times, late in the season, pregnant rabbits have been shot. This may be more prevalent this year because of our unusually mild winter. This has never been a source of concern, however, because of both the high reproductive potential and the high natural mortality of rabbits. A single female cottontail can have two or three litters during the summer, producing more than 20 young. Research has also shown that 80 percent of the rabbits present in the fall will die from some cause before spring arrives in the following year."

Urban areas are also the primary sources of enquiries on how to deal with nuisance wildlife:

"Control of Canada goose numbers is usually accomplished through the removal of eggs from breeding pairs. This is done with the co-operation or approval of the Canadian Wildlife Service. In addition, what normally attracts geese to an area is not so much the presence of ponds and pools as the presence of well-fertilized lawns. Grass is one of the principal foods of geese. Reducing the amount of fertilizer on lawns may discourage the geese, but it will naturally also affect the condition of the grass. Hunting seasons in outlying areas will also help to reduce goose numbers."

Many of our enquiries come from younger people requesting information for school projects, or simply writing out of curiosity. The answers must be carefully composed. Letters to children are good examples of the perennial need to remember the audience:

"The golden eagle is one of Ontario's endangered species, so the booklet that comes with this letter has something to say about it. Perhaps you will enjoy learning about the other birds, mammals, plants, and insects in the booklet as well. We are also sending you a sheet that tells how to get more information on the birds in which you are interested."

Or:

"We know that some people do not like hunting. Other people, though, do enjoy hunting, and as long as this does not destroy all the animals or harm other people, we allow it. Many activities which attract some people do not attract others, and we must try to be fair to all."

Or:

"Some people like to buy meat from a store. Other people like to go hunting and get their own. One day a boy asked his father, "Why do you go and shoot ducks at the pond instead of buying ducks at the store?" His father said, "I like to hunt the wild ducks because they always have a chance to get away. The ducks in the store come from the farm. They never have a chance to get away." So, you see, there is more than one way of looking at hunting, just like everything else."

In dealing with enquiries, we have discovered three common pitfalls in communicating with the public about wildlife.

The first of these is answering unasked questions. We are naturally inclined to think that there are certain things that people should know about. The temptation is to use any question as a pretext for passing on information that we think important. The problem is that most people find this irritating, or baffling, or both. We try to confine ourselves to supply-

ing the information that people actually want, not what we think they ought to have.

The second pitfall is the use of too many technical terms. Some terms are, of course, unavoidable. We must speak of "wildlife populations" because no other words convey the intended meaning. On the other hand, many technical terms are a sort of shorthand, and the ideas contained in them can be expressed in simpler words. We must resist the tendency to assume that what is known to us is known to everyone. When we constantly read technical material, and think in technical terms, this assumption is difficult to discard. Moreover, we may not even be aware of it. With practice, however, we can overcome this tendency.

The third pitfall is not considering our specific audience. Stock answers have their place, especially when we are responding to a group of enquiries or complaints on the same subject from people of similar backgrounds and interests. We cannot, though, respond to an eight-year-old child in the same way we would to a university professor. This may seem to go without saying, but we have discovered that this sort of thing used to happen much more often than it should have. Simply sending out a pamphlet or brochure, or a standard reply, may be appropriate in many cases, but there are also many cases when it is not.

Above all, our task is to communicate effectively. We live in an age when the voice of "authority" is very weak indeed. The time is past when wildlife managers, or anyone else for that matter, can simply present their "credentials" and expect the public to accept what they say and do without hesitation. Today, people in general simply will not accept what they do not understand. Failure to grasp this fact is one of the major causes of frustration in the public service. On the other hand, while there are some people we can never satisfy, most will accept reasonable actions and statements when the language in which they are conveyed is clear.

Harold Jenkins
Wildlife Information Officer

Province and Trappers Agree on Fur Management

On August 15, 1984, the Hon. Alan W. Pope, Minister of Natural Resources, signed a legal document with the Ontario Trappers Association (OTA). This General Agreement, or memorandum of understanding, will guide the working relationship between the Ministry and the Ontario Trappers Association over the next several years. The signatories for the OTA were Alcide Giroux, President, and Eldon Hawton, Coordinator.

Since 1947, when the OTA was first incorporated, the Ontario Ministry of Natural Resources has worked closely and amicably with the OTA, first as the Department of Lands and Forests and later as the Ministry of Natural Resources. This history of co-operation is recounted by Ralph Bice in his book, *Fur: The Trade That Put Upper Canada On The Map* (1983, Temiskaming Printing Co. Ltd., 159 pp).

There has been, for some time now, a realization that furbearers and trappers both benefit greatly if the OTA and the Ministry work closely together, and that neither organization's program can be successful without the co-operation of the other agency. In Ontario, we like to refer to this as "participatory management." (For further details on participatory management, see the December 1983 issue of the Canadian Trapper magazine).

The first broad example of participatory management was the implementation of the registered trapline system during the period between 1943 and 1950. Following this, the government's long-term, active role in working with the OTA to make the Fur Sales Service a success began. The Service helps trappers market their pelts. I do not think that most trappers across North America realize what a beneficial effect this marketing system has had on their lifestyle, and on their economic and social well-being. The Fur Sales Service managed to secure for the trapper a fair price for his pelts - a price based on world markets. What is more, it compelled other dealers to offer similar services such as unconditional money advances. In addition, the Fur Sales Service treated each trapper equally, whether the trapper shipped in one muskrat pelt or 400 beaver pelts.

Active government involvement in the Fur Sales Service continued until 1966, when the annual $5,000 operating advance was discontinued. Since that time, the operation has been self-sufficient.

Other, more recent, examples of co-operative activities with the OTA include the trap research and testing carried out in the early 1970s, the development of the Fur Harvest, Fur Management and Conservation Course for all first-time trappers, the creation of district and regional trappers' councils (of which there are now about 100), and, of course, the recent Private Lands Trapping Program.

Not all co-operative ventures are as extensive as those mentioned above. In fact, most are small-scale endeavors. For example, since 1958, government representatives have co-operated with Alex Shieff, Fur Sales Manager, in grading pelts to determine, for example, whether the beaver-trapping season could be opened 10 days earlier in a locality. The two parties have also attended meetings with humane groups, co-operated on several animal-disease fact-finding projects, helped to select qualified people to fill trapline vacancies, and organized many local workshops.

Today's trappers are concerned. They are concerned about the environment, the furbearing animals in that environment, and the trapper's role in that environment (Kellert, 1980, "Trappers and Trapping in American Society," First Worldwide Furbearer Conference). Kellert's national survey found that today's trapper is a very knowledgeable citizen who understands more about nature and wildlife than anyone else except a wildlife professional with an advanced degree.

The trapper's range of experience is unmatched. A hunter may spend three or four days in pursuit of deer or moose and consider himself an expert on the subject. But a trapper usually spends three or four months - sometimes as long as six months - observing the furbearers on a trapline, a relatively small piece of land averaging 119 square kilometres in Ontario.

The government and the trappers of Ontario – or the furbearer managers, as we should really call them – share a goal and have many things in common. Many of these are mentioned in the General Agreement which is printed in its entirety at the end of this article. The agreement refers to four broad areas: proper wild furbearer husbandry, humane trapping, the environment, and promotion of the industry; it also mentions several specific areas: quota and season setting, trapper-instructor training, and the sharing of biological data on pelt size and quality.

Not surprisingly the General Agreement also talks about privatizing some functions which have traditionally been done by government. It is the government's policy to privatize, or turn over to the private sector, as many of its functions as is feasible in order to boost the economy and give the private sector a greater say in how things are run.

An example of successful privatization is the government's Licensing Agreement with the OTA, which was signed in 1982. The Licensing Agreement gives the OTA the exclusive right to print and market various publications and films copyrighted by the Ministry. At present, the OTA markets some 11 books and booklets and 10 films used in trapper education. The Licensing Agreement further states that any profits from the sales of these works must go to a non-profit Trapper Education Fund, which is subject to audit by the Ministry.

To aid this fund, the Ministry has agreed to contribute to it the proceeds from all seized pelts. The proceeds from the Ministry-sponsored breakfasts at the OTA annual convention also go into the fund.

Why was a General Agreement signed? The basic idea is to formally recognize the co-operative relationship which has existed between the OTA and the Ministry for many years, and to de-emphasize the personalities involved as much as possible over the course of time.

Will the General Agreement cause immediate changes in who does what, and in the Ministry's sphere of responsibility? No, it will not. The agreement simply sets forth certain broad, agreed-upon statements of what we want to achieve collectively, and where we want, and need to co-operate. However, in the long run changes will become noticeable. The trapline manager (that is the trapper) will assume more responsibility for the resources in this area. The OTA, too, will also take on more duties.

One area that needs to be considered now is education. How should it be delivered in the future? Who can best train and audit the instructors? Do we need to change the existing method of giving the courses through community colleges?

Another immediate area of application is the vast amount of biological data generated by the Fur Sale Service. We need to begin to use more of the pelt-size, sex and pelt-quality data in the Provincial Fur Management Program in setting seasons and, more importantly, in assigning quotas. At a time when so many people are working to end trapping, the best defense is a biologically sound harvesting strategy. In the past, it was virtually impossible to handle all this data. Now, computers make the job possible and relatively inexpensive.

Milan Novak
Co-ordinator
Fur Management Program

Communication is a Two-Way Street

The successful implementation of wildlife or other government programs is as dependent upon communication with the public as industry and commerce are upon the interchange of raw materials and manufactured goods. Without the raw material of public opinion, governments cannot produce the finished product of effective programs.

In order to assure a satisfactory response to problem situations, a continuous two-way flow of information among the responsible government agency, the public, and other associated agencies is required during all aspects of a program's existence.

This article will examine some of the ways wildlife agencies communicate with the public and ensure adequate public input into their programs, using examples from Saskatchewan's existing activities.

Identification

Identification of a need is the first step toward program development and may have many sources.

In wildlife management, farmers, hunters, non-consumptive users, trappers, treaty Indians, politicians, lobby groups, other government agencies, or the originating government wildlife agency itself may identify a problem. In some cases, letters to the minister or high-ranking department officials may stimulate program development.

Resolutions from all major interest groups serve as a basis for much of the "public" side of wildlife management.

The initiation of Saskatchewan's Wildlife Development Fund program is a result of resolutions and lobbying by the Saskatchewan Wildlife Federation. This program, developed by Saskatchewan Parks and Renewable Resources, uses a portion of the revenue accrued from the sale of hunting licences to purchase privately owned lands for the purpose of preserving or enhancing wildlife habitat.

Farmers identified the need for the Wildlife-Landowner Assistance Program (WLAP), in Saskatchewan, through letters to government officials and the Association of Rural Municipalities. Crop depredation by ungulates and bears was the cause of the farmers' complaints. WLAP provides damage prevention materials to farmers and assistants in intercept feeding of ungulates. These measures allow farmers and wildlife to co-exist favorably and demonstrate a willingness on the part of the government to respond to public needs.

Hunters and non-consumptive users in Saskatchewan combined to express concern about diminishing wetland habitat in letters to government officials, as well as through the lobbying of Ducks Unlimited, the Saskatchewan Natural History Society, Nature Conservancy of Canada, and the Saskatchewan Wildlife Federation. Their interest supplied the impetus for the development of the Heritage Marshes program which maintains and improves major wetlands and marsh complexes in Saskatchewan.

Program Design

Once a need has been established, a corrective program strategy is then sought. The role of communication in program design is to discover solutions which satisfy the biological/ecological requirements of a problem situation, without causing strong negative public reaction.

The originating agency must now become proactive as well as reactive in its approach. While developing a suitable program response, it must listen to and educate the public at the same time.

Government agencies disseminate their information and program options to the public through pamphlets, press releases, reports, films, and public announcements. Radio, television, and newspaper ads or interviews are available as vehicles to convey information to the public. However, the prominence of wildlife or related lobby groups in forming program policy must not be overlooked. In essence, these groups represent public opinion on wildlife issues or, at least, the potential for a substantial influence over public opinion.

Given the importance of public input into wildlife programs, it is not surprising that Saskatchewan has developed its own "mass transit" communications vehicles to promote the exchange of information. A Wildlife Advisory Committee meets several times a year to discuss wildlife issues and recommend hunting season dates and bag limits for big game and game birds. Members of this important committee include:

Saskatchewan Association of Rural Municipalities
Saskatchewan Wildlife Federation
Saskatchewan Trappers' Association
Saskatchewan Stockgrowers' Association
Northern Saskatchewan Outfitters' Association
South Saskatchewan Wildlife Association
Saskatchewan Natural History Society
Saskatchewan Association of Northern Local Governments

The diversity of the organizations serving on the committee ensures comprehensive public input into existing or proposed wildlife initiatives.

A most important communication link has been forged between Saskatchewan Parks and Renewable Resources and the Saskatchewan Wildlife Federation (SWF). This 33,000 member organization is the largest and most supportive wildlife group in the province. As a consequence, a high priority is placed on the explanation of wildlife issues and department initiatives at the annual SWF meeting held in February.

Department staff often attend SWF executive meetings and zone conventions, while regional wildlife biologists are encouraged to attend local branch meetings. The senior SWF executive enjoys direct access to department officials of all ranks to ensure the communication channels are continually open for the exchange of ideas and adequate feedback on program initiatives. Regular attendance of Saskatchewan Trappers' Association meetings by department and wildlife staff affords a yearly opportunity to extend the scope of dialogue between government and this specific user group.

Solutions to a problem situation may be offered by one or more lobby groups, but the final program design is the responsibility of the originating wildlife agency. Only when public input is combined with research and the knowledge of wildlife biologists, can an appropriate choice of action be arrived at.

No matter how enlightened a program initiative may be, a strong negative public reaction can jeopardize its implementation. If the variance between public reaction and public solution requirements is too great, education of the public is required before program implementation can begin.

Sometimes a more socially acceptable, though partial, alternative must be adopted and promoted, until the public is more responsive to the need for further action in a particular area.

Saskatchewan's innovative Critical Wildlife Habitat Protection Act represents such a partial solution. The protection of habitat critical to wildlife is a substantial problem in agricultural Saskatchewan. The Act protects one-third of the total critical habitat in southern Saskatchewan by prohibiting the sale or alteration of critical habitat on Crown leased agricultural lands. The other two-thirds of all critical wildlife habitat is on privately controlled land and remains unprotected. The communication task, in this case, is clear. Sell the Act to the public, while promoting an understanding of the need for further initiatives to deal more completely with the overall problem of habitat loss.

Promotion and Implementation

Communication takes on another function during the promotion and implementation phase of a program. In addition to maintaining ties with supportive lobby groups, communication must be extended to program staff. These staff may be members of the program agency or an associated agency.

Conservation officer discussing wildlife issues with a farmer.

In Saskatchewan, regular wildlife bulletins and population management information sheets keep conservation officers (operations staff) abreast of wildlife initiatives and background material. Because conservation officers are the people most often called upon to implement wildlife programs, this communications link is vital. Wildlife biologists are stationed in regional offices, with the aim of enhancing the working and communication ties of the Wildlife Branch and the Regional Operations Branches.

Conservation officers and regional biologists serve a dual role in Saskatchewan's "communications highway." They not only assist in wildlife program delivery, but channel public reaction concerning wildlife initiatives back to the central wildlife program staff, directly or through operations supervisors. Their contact with the public in the field and presence at public meetings yields a better appreciation of how program initiatives are perceived in the society at large. As well, their intimate knowledge of common attitudes assists in identifying when program adjustments or better communication are required.

During implementation, other government agencies may provide valuable information for program adjustment, because the administrative duties of those agencies overlap or complement a wildlife agency's area of operation.

Saskatchewan Parks and Renewable Resources uses data from Saskatchewan Agriculture's Crop Insurance Program to evaluate the efficiency of its Waterfowl Crop Damage Program. The location of damage claims is instrumental to wildlife biologists in the placement of lure crops and bait stations. The number of damage claims filed is also an indicator of public acceptance of the Waterfowl Crop Damage Prevention program, and the success of its implementation.

Display modules presented at fairs and other special events can also be used as two-way communicators. Saskatchewan's Problem Wildlife Display allows the government to directly explain its initiatives in the area of problem wildlife management, while measuring public response to those programs. The number of people, kind of comments and interest expressed are recorded by display facilitators on a form designed for that purpose.

Evaluation

Communication is an important element in evaluating the success of a wildlife initiative. All the pathways for public input, discussed earlier in this article, are used in this process. The amount and kind of comments received from the general public and the level of understanding of program aims expressed by lobby groups serve as indicators of program success. The development and strength of anti-program groups or the lack of public reaction to a program can be positive or negative, depending upon the program aims. Surveys are also useful in assessing program success.

A survey of farmer attitudes toward wildlife, habitat retention, and hunting in Saskatchewan, indicates that in 1976, 30 percent of farmers thought there were too many ducks on their farms. In 1984, a follow-up survey indicates that only 17 percent of farmers felt there were too many ducks on their farms. Although other factors have played a part,

much improvement in farmer attitude toward waterfowl must be credited to Saskatchewan's Waterfowl Crop Depredation Program.

Communication Goal

The function of communication in wildlife program development does not end with program evaluation.

In the pursuit of long-range goals, a wildlife agency must extend itself by reaching into the public school classrooms to build an understanding of wildlife concepts.

Project Wild, which is soon to be inaugurated in Saskatchewan, is an example of the long-term building of positive public support for future wildlife initiatives. Wildlife concepts and conservation issues are used as background for the teaching of basic mathematics and other subjects. Extensive testing of Project Wild shows that children are fascinated by wildlife and are, therefore, more susceptible to wildlife management education than many adults, who often carry too many ingrained prejudices or many have counter-conservation vested interests. It is hoped that a better informed and more responsive public will develop as a result of the use of this program.

Summary

Government programs are not created in a vacuum or delivered single-handedly by any one originating agency. Co-operation and co-ordination between government agencies and the public are needed to make any program a beneficial reality. Communication can truly be likened to a two-way street which facilitates that interdependent relationship from the identification of a need to the successful delivery of a program and beyond.

John C. Cook
Information Officer
Wildlife Branch

The Canadian Wildlife Federation's Role In Communications

An important function of the Canadian Wildlife Federation (CWF) is to generate a broad public awareness and understanding of Canada's wildlife resources, and their needs in terms of conservation and effective management. This activity provides a service which, in part, parallels the efforts of government agencies in communicating about wildlife but, in a co-operative way, it can also be supplementary. The federation's responsibility extends beyond simply communicating about wildlife. It includes the monitoring and interpretation of a broad range of wildlife-related activities and government action, or the absence thereof.

The CWF function thus includes informing its members and the public about national issues, important to the interests and well-being of wildlife, and about what are perceived to be policy or management shortfalls. The federation can often communicate more freely than can government agencies on some particular issues. To do this effectively, CWF has developed several means of communicating with its constituents and the public about wildlife and conservation.

General information of broad interest is distributed through several publications. International Wildlife Magazine is the primary publication addressed to adult readers. It carries a variety of articles and stories about wildlife in different parts of the world, but each issue has at least one feature article about Canada. These deal with a species, issue, or situation of broad public interest to Canadians. The magazine is published six times a year.

Beginning with the January-February, 1984 issue, International Wildlife has been edited and printed in Canada. Canadian Chronicle, containing editorial comment and reference to current Canadian wildlife and environmental issues, is a regular feature. Biosphere, a new French language edition of the magazine was introduced in January 1985. This has opened a whole new era for CWF, which is now busily engaged in developing a fully bilingual capability to serve its members in both official languages.

Ranger Rick is the federation's junior magazine designed for the six to twelve year age group. It is published monthly, in English only, and contains a variety of articles, stories, and features, which appeal to junior readers. It is also edited and printed in Canada. Eventually it is expected that Ranger Rick will also be produced in a French language edition, but plans and timing are still uncertain.

Your Big Backyard is a beginner's publication, designed for the three to five year age group, containing pictures, stories, puzzles, and projects. It is produced, as an introduction to wildlife and the natural world, in a series of 36 booklets, intended for distribution at one month intervals over a period of three years. The series was developed by the National Wildlife Federation, and distributed by CWF to Canadian subscribers. Although CWF is continuing to distribute the publication, it is no longer being actively promoted. Plans for replacing the series, with a Canadian designed and produced alternative, are currently in progress.

The federation has produced the National Wildlife Week booklet, on behalf of the Federal-Provincial Wildlife Conference, since its inception. The accompanying poster has always been a prominent feature and is regarded by some as a collector's item. In recent years, an effort has been made to upgrade the

publication and to improve its educational quality. A teacher's guide and lesson plan have been added to the kit, and other relevant material has been enclosed. Development of the student poster contest based on each year's theme, the selection of regional and national winners, and their recognition of CWF, has added interest to the publication. This effort has been a valuable means of communicating about wildlife, and it has generated activities extending far beyond those of National Wildlife Week.

In addition to communicating about wildlife, through its own publications, the federation obtains and distributes, as and when available, booklets or publications produced by other agencies on a variety of subjects. The Hinterland Who's Who series, produced by the Canadian Wildlife Service, is a popular and informative example of these publications. This group has included Wetlands by CWS; The World's Whales by Canadian Nature Federation; Natural History Notebooks, a series by the National Museum of Natural Sciences; Information Series by Fisheries and Oceans, covering seals, whales, walrus and fish species such as Canada's Pacific Salmon. Posters on acid rain and pollution, produced by Environment Canada and other agencies, are included among the publicatons distributed by CWF, and when available, these may be provided in English or French.

CWF assumed responsibility for producing and distributing a series of summaries on the status of rare, threatened and endangered species of plants and animals, identified by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC). On the basis of written material provided by the committee, the federation designed and produced a distinctive series covering those species whose status was reviewed and categorized. For easy reference, the summaries are produced in a different colour for each category. Printing, quantity, and distribution are based on orders placed by participating agencies. Tardiness in ordering, and an apparent lack of commitment by some COSEWIC members, has unduly delayed the production of these summaries. This situation needs to be reviewed if communication about the status of wildlife in Canada is to be pursued effectively.

Mail is an important form of communication utilized by the federation. Several thousands of letters are received each year, from members and the public, seeking information or expressing an opinion on a wide range of topics and on national or regional issues. To deal efficiently with the large volume, position statements or background information papers are prepared in advance, and sent with a brief covering reply. Letters from children all receive a direct personal response. Many of these are generated by National Wildlife Week material, but they may be received throughout the school year. Many local problems are referred directly to government agencies when CWF does not have the information or background required for a proper reply. Hunting, trapping, whaling, sealing, predator control, gun control, feeding and housing birds, endangered species, and man/wildlife conflicts are the most persistent topics on which information is sought.

Finally, a direct approach to communicating about wildlife is taken through public speaking engagements, participation in conferences, and involvement in conservation projects, along with recreational, art or cultural affairs. These efforts are also supported by occasional television appearances, news media interviews and by news releases. Comments to the news media are usually a response to an issue or situation, where an immediate statement is considered to be most effective or essential.

Underlying all the federation's efforts to communicate about wildlife, with its members and the public, is the knowledge that, to be effective, CWF must maintain a high level of credibility. Therefore, communication must be factual, clearly stated, and respectful of the divergent cultural and philosophical views existing within Canadian society. It is not possible to please everyone, or to respond to all philosophies, but a straightforward statement can often serve to generate understanding and awareness where none previously existed.

It is essential to remember, at all times, that our primary mission is the long-term well being of wildlife, not our own personal agendas. Thus it is essential to maintain communications, and a spirit of co-operation, between government and non-government agencies which share our interests in and responsibilities for the well being of wildlife.

K.A. Brynaert
Executive Vice President

Ducks Unlimited Canada

Wetlands and Waterfowl -- Getting Out the Message

Private conservation organizations such as Ducks Unlimited (DU) Canada are constantly seeking support from a number of groups in society because, unlike government, they do not, in themselves, have powers to legislate or regulate and because they must continuously be reaching out for support - financial, social and political.

As a result, private organizations, to stay robust (even alive) and to effectively accomplish their goals, must devise and aggressively carry through multi-directional communications - information programs that take advantage of a wide range of channels and employ imagination in message transmissions.

Ducks Unlimited Canada identifies some major communications target groups and has organized its outreach efforts accordingly. These target groups are financial contributors, landowners, governments and the general public. All must be recognized for their ability to give sustenance and meaning to the organization and each must be recognized and respected for the peculiar capabilities and self-interest each possesses.

Contributors

In a private conservation organization, financial contributors provide the fuel for survival - not only in the form of essential cash, but in terms of energy itself. These people are not simply investors or shareholders, but generally commit their money, time and talents toward the "mission" that characterizes the organization. In the case of Ducks Unlimited Canada and Ducks Unlimited Inc., the mission is to increase or preserve waterfowl populations by providing essential breeding, brood rearing and staging habitat - especially breeding habitat.

To do this 42,000 Canadians and 540,000 Americans - mostly sportsmen - annually put nearly $40 million on the line. Fund raising is a dynamic affair. The funds are not simply passive donations caught by a passing collection plate or dunning letter. Contributors take an active role in their giving. They want the resource to fare well, they want to know how their money is spent and they would like, in some way, to feel they have truly participated in carrying out the mission. If you're dealing with sportsmen, you're dealing with a resource activist who has an enthusiastic, emotional and often macho relationship with the resource. The organization's communications better reflect that.

Ducks Unlimited certainly has been successful in communicating with waterfowl enthusiasts. Participation is encouraged through fund-raising events that bring them together to share experiences and hear first hand from organization staff what wetland projects are being developed. The events themselves - be they auctions, benefit shoots or special shows - are organized by local committees, not paid staff.

The organization's messages are generally designed to appeal to the contributor's familiarity with the resource - whether it's hunting or admiring from close range. The assumption is made that the contributor can sense the entire environment of the resource - that he, in essence, is an intimate part of it. In the case of DU Canada, the visual message is stressed and the visuals are strongly biased toward marsh scenes and marsh creatures. Items, icons, images, all depict waterfowl in strongly positive "poses."

Landowners

Landowners look at waterfowl and wetlands from several personal perspectives. Their provision of land toward wetland development projects is motivated by different self interests - some that could be described as unselfish and enthusiastic and some that are more passive and in self-interest. All are recognized as quite legitimate and certainly essential to the well-being of the organization. Perhaps in

this area of land use provision by both private and public representatives, Ducks Unlimited is unique in the degree to which its mission depends on these providers.

Communications with landowners is not as "hype" as the style and form of the messages directed to contributors. Through the Canadian magazine called the Conservator much is written about landowners and specific projects that feature multi-use advantages. Indeed the Conservator was created to circulate to landowners and only later was its circulation expanded to contributors. The overall message still remains basically landowner-project oriented.

As well as through the magazine, person-to-person communications are directed at landowners by area office staff across the country who examine wetlands and negotiate easements for projects.

An agricultural extension program has also been introduced to emphasize the positive relationships between good land management and wetland preservation. The message is conveyed through on-farm demonstrations across the prairies and shared events with professional agriculturists representing provincial departments of agriculture.

Governments

Ducks Unlimited Canada is not unlike other wildlife organizatons in the high degree of dependency it has on the programs and policies of government resource departments. While the organization could exist without government co-operation, it would certainly be hobbled without access to extensive Crown lands or the benefit of policies protecting the resource in some manner.

Much of the communicating with governments is, in the case of Ducks Unlimited, interpersonal contacts either professional-to-professional or politician-to-politician. The latter is provided by influentials on the Board of Directors who relate to the full time politicians and have access to their "ears" from time to time.

Professional biologists and engineers confer with their civil servant counterparts in regard to special undertakings, regulations or shared research. It happens at conferences, meetings, professional society meetings, lunches or shared work sites. Memos, reports and journals are exchanged.

General Public

It's not enough to generate support, no matter how enthusiastic, from contributors or members alone. Things get done or don't get done in a democracy over time by having the support of a segment of the general public. If the general public sees waterfowl as beautiful and important creatures in our land, and wetlands as the essential habitat or as environmentally important entities, then efforts to foster these creatures and elements evoke positive, if generalized, support. Governments or other agencies would then face some kind of opposition or outcry if public programs and discussions were detrimental to the future of the resource.

Reaching the general public involves a long list of mass media or large group communications exercises. In the case of DU Canada - and there's nothing unique here - the techniques employed are public service television advertising, radio and newspaper advertising, media releases, displays at special events, films for wide distribution, cultivation of close relations with special media representatives and lectures. There is more.

All one can hope for in these cases is to create, through wise use of these outlets, an overall positive image about the resource. Facts will be forgotten even though the information should be factual. Details will be missed even though the creator of the "pieces" must respect details. By ensuring the material is well-presented the image formed in the minds of the receiver will be "good." It is an exercise that must be unceasing in this world of communications clutter. No wildlife organization can dare rest on its laurels any more than a commercial firm.

Conclusion

Summing up is simple. A private conservation organization must communicate broadly and effectively to survive for any length of time. To thrive, it must communicate constantly and creatively, and recognize who it is aiming its messages at. Those messages must be tailored to the characteristics of those essential support groups because each, in its way, adds to the level of success of the organization's mission.

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